

**ALBUQUERQUE POLICE DEPARTMENT
COMPREHENSIVE STAFFING ASSESSMENT
AND RESOURCE STUDY**



ALEXANDER WEISS
CONSULTING

FINAL DRAFT REPORT
December 11, 2015

Table of Contents

Introduction.....1
Patrol Operations.....8
Work Schedule.....27
Managing the Demand for Police Services... 33
Operational Support Staffing37
Professional Accountability Bureau.....49
Administrative Services Bureau.....52
Conclusion and Recommendations..... 53
Appendix One: Sworn Staffing by Unit.....63

Figures and Tables

Figure 1 APD Bureau Structure	6
Figure 2 APD Area Command Boundaries.....	7
Figure 3 Number of CFS in Each Area Command	13
Figure 4 Percentage of CFS by Area Command.....	14
Figure 5 CFS by Hour (City-wide).....	15
Figure 6 CFS by Hour by Area Command	15
Figure 7 CFS by Day of Week (city-wide).....	16
Figure 8 CFS by Month	16
Figure 9 CFS by Shift	17
Figure 10 Model of CFS Time	17
Figure 11 Queue Time for Priority One CFS by Area Command	19
Figure 12 Distribution of CFS Total Time.....	19
Figure 13 Example of 5-2 Work Schedule	27
Figure 14 Example of 5-2 schedules with variable staffing by day of week	28
Figure 15 6/2 Work Schedule	29
Figure 16 4-10 Plan.....	29
Figure 17 Comparison of 8 and 10-hour deployment.....	30
Figure 18APD Work Schedule (Day and Swing Shift)	31
Figure 19 APD Graveyard Shift Work Schedule.....	31
Figure 20 APD Crashes by Hour of Day	46
Figure 21 Proposed Staffing for IAD.....	49
Figure 22 Proposed Leadership Structure.....	54
Figure 23 Area Command Organizational Structure	60
Table 1 Total APD Employees.....	4
Table 2 APD Sworn Positions by Grade	5
Table 3 Components of CFS Time (city-wide)	18
Table 4 Largest CFS by Category (city-wide)	20
Table 5 Summary of Benefit Time Off	20
Table 6 Calculation of Shift Relief Factor	21
Table 7 Staffing Estimates (25% Backup)	22
Table 8 Staffing Estimates (50% Backup)	23
Table 9 Staffing Estimates for Area Commands.....	24
Table 10 Staffing Estimates for 12-Hour Shifts	26
Table 11 Example of 12 Hour work schedule.....	32
Table 12 APD SWAT Activations Year to Year Comparison.....	43
Table 13 Communication Center Daily Staffing	50

Albuquerque Police Department Staffing Study

In December 2014, the City of Albuquerque engaged Alexander Weiss Consulting, LLC to conduct a staffing and organizational analysis of the Albuquerque Police Department (APD). This report describes the results of that analysis. Our work is based on interviews with department staff and examination of records, policy and procedure.

Introduction

The Albuquerque Police Department is a full service law enforcement agency. The FY15 budget for the agency was \$149,875,000.

As of November 25, 2015 the department staffing was as follows:

Sworn Positions	
Police Officers	762
Part-Time Rehire	8
Full-Time Rehire	65
Metro Court	6
Non-sworn Positions	
Cadet	47
Non-sworn	391
Crossing Guards	133
Community Service Assistants	22
Police Service Aides	16
Total Sworn	841
Total Non-sworn	609
Total Employees	1450

Table 1 Total APD Employees

The following table illustrates the distribution of sworn personnel by grade. Note that it uses a different classification scheme than the one shown in Table One.

Chief	1
Assistant Chief	1
Deputy Chief	2
Major	3
Commander	13
Lieutenant	35
Sergeant	99
Sergeant Ranger	2
Patrolman second class	48
Police officer first class	648
Cadet	47
Open Space Ranger	6
Metro Court Officer	6
Community Service Asst	22
Total	933

Table 2 APD Sworn Positions by Grade

One thing to note is the span of control. First, the ratio of commanders to lieutenants is 1:2.5, and the ratio of lieutenants to sergeants is 1: 2.9. The ratio of sergeants to police officers (PO1 PO 2 and Open Space) is 1:6.9.

Based on our analysis the APD will be adequately staffed at the level of 1000 sworn personnel (Reference Table 9 on page 24 and Table 10 on page 26).

The APD has five major bureaus:

- Professional Accountability Bureau
- Field Services Bureau
- Administrative Support Bureau
- Investigative Bureau
- Special Services Bureau

The bureau reporting structure is illustrated below.



Figure 1 APD Bureau Structure

The department has a modest degree of decentralization. There are six area commands that consist largely of officers assigned to patrol and a small number of investigators assigned to “Impact” teams. A substantial fraction of sworn personnel, however, are not assigned to the area commands, including personnel assigned to the investigative bureau and the special services bureau. The area command distribution is illustrated in Figure 2.

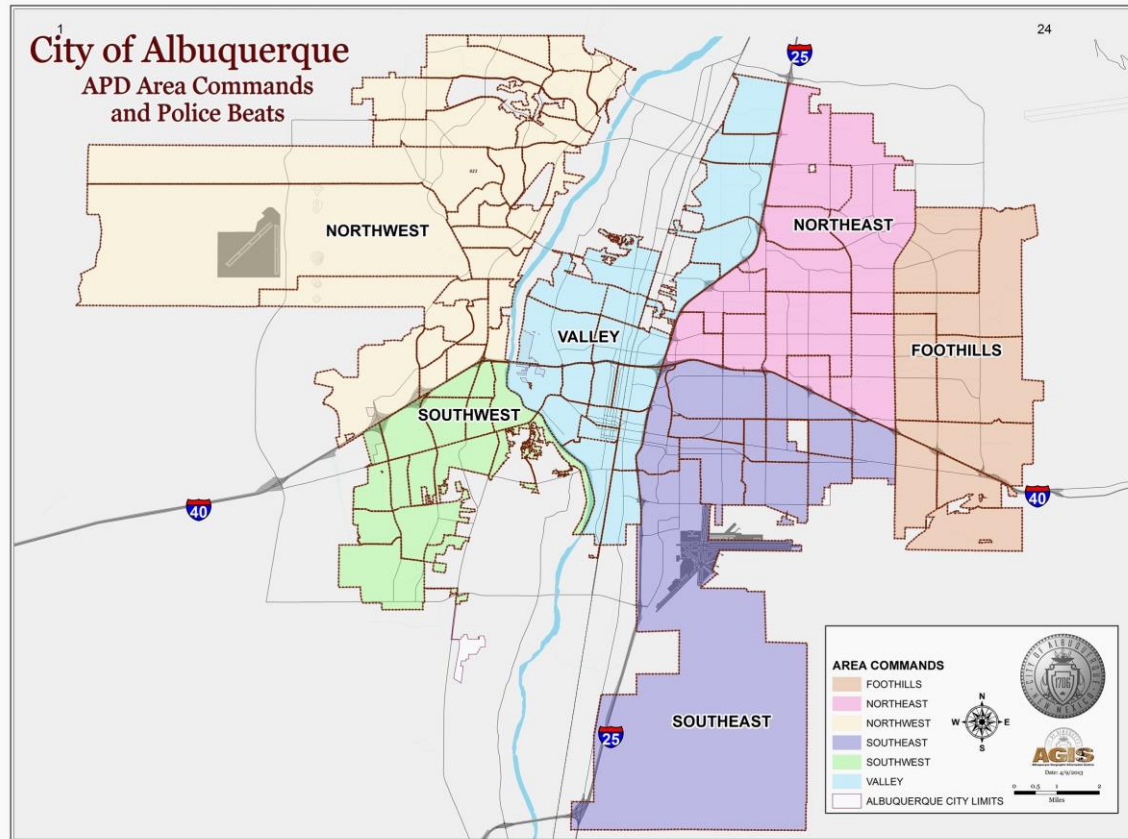


Figure 2 APD Area Command Boundaries

Our study of staffing and deployment examines a number of key questions including:

- Is the patrol division staffed and organized to perform its core mission?
- Do the agency structures support concepts of unity of command, and span of control?
- Are lines of authority and responsibility well defined?
- Is authority temporally or spatially focused?
- What is mix of sworn and non-sworn positions? Are sworn personnel occupying positions that could be performed more efficiently or effectively by non-sworn personnel?
- What is the degree of functional specialization and how does that influence performance?
- To what extent, if any, do employee labor agreements limit the ability to effectively and efficiently manage resources?
- Does the organizational structure impede effective internal communication?

To summarize, our study will attempt to answer five questions:

- What does the police department do?
- What does it want to accomplish?
- How does it do it?
- Are there better ways to do what they do now?

- How many people are needed to accomplish its mission?

Patrol Operations

In the face of increasing costs and shrinking revenues, many communities are asking how many police officers are required to ensure public safety. Put another way, what number of officers would help an agency most cost-effectively meet the demands placed on it? This is a fundamentally different question than how many officers does a community want or can a community support. Yet answering the need question effectively frames a discussion about *want and affordability*.

Unfortunately, law enforcement administrators have few resources to guide them in determining the number of officers they need. To be sure, there are multiple approaches to answering this question, ranging from the simple to the complex each with a range of advantages, disadvantages, and assumptions.

The sections that follow highlight common staffing approaches and demonstrate how agencies may develop and use a workload-based assessment of patrol staffing needs that incorporates performance objectives for discretionary time. Where possible, workload-based approaches are superior to others in that they can help provide a better and more objective way to determine staffing needs. Additionally, comprehensive assessments for patrol help to answer a host of critical questions regarding resource allocation and deployment.

Traditionally, there have been four basic approaches to determining workforce levels: per capita, minimum staffing, authorized level, and workload-based. Each differs in its assumptions, ease of calculation, usefulness, validity, and efficiency. Each is reviewed below to provide context for developing an evidence-based approach to police staffing.

The Per Capita Approach

Many police agencies have used their resident population to estimate the number of officers a community needs. The *per capita* method compares the number of officers with the population of a jurisdiction. To determine an optimum number of officers per population—that is, an optimum officer rate—an agency may compare its rate to that of other regional jurisdictions or to peer agencies of a similar size. Although it is difficult to determine the historical origin of, or justification for, the per capita method, it is clear that substantial variations exist among police departments.

Advantages of the per capita approach include its methodological simplicity and ease of interpretation. The population data required to calculate this metric, such as census figures and estimates, are readily available and regularly updated. Per capita methods that control for factors such as crime rates can permit communities to compare themselves with peer organizations. The disadvantage of this method is that it addresses only the relative quantity of police officers per population and not how officers spend

their time; the quality of their efforts; or community conditions, needs, and expectations. Similarly, the per capita approach cannot guide agencies on how to deploy their officers.

Agencies using the per capita method may risk a biased determination of their policing needs. There are several reasons for this. First, a generally accepted benchmark for the optimum-staffing rate does not exist. Rather, there is considerable variation in the police rate depending on community size, region, and agency structure and type. For example, it is generally known that police rates are substantially higher in the northeastern than in the western regions of the United States. When comparing individual jurisdictions, it is not uncommon for similar communities to have per capita rates that are substantially different.

Given the disadvantages noted above as well as others, experts have strongly advised against using population rates for police staffing. The IACP warns, "Ratios, such as officers-per-thousand population, are totally inappropriate as a basis for staffing decisions Defining patrol staffing allocation and deployment requirements is a complex endeavor which requires consideration of an extensive series of factors and a sizable body of reliable, current data."

The Minimum Staffing Approach

The *minimum staffing* approach requires police supervisors and command staff to estimate a sufficient number of patrol officers that must be deployed at any one time to maintain officer safety and provide an adequate level of protection to the public. The use of minimum staffing approaches is fairly common and is generally reinforced through organizational policy and practice and collective bargaining agreements.

There are two principal reasons a jurisdiction may use a minimum staffing approach. First, policy makers in many communities believe a minimum number of officers are needed to ensure public safety. This may be particularly common in small communities where there are relatively few citizen-generated demands for police service yet residents expect a minimum number of officers to be on duty at all times. Second, police officers themselves may insist (often through collective bargaining) that a minimum number of officers be on duty at all times. In some communities, the minimum staffing level is established by ordinance.

There are no objective standards for setting the minimum staffing level. Agencies may consider population; call load, crime rate, and other variables when establishing a minimum staffing level. Yet many agencies may determine the minimum necessary staff level by *perceived* need without any factual basis in workload, presence of officers, response time, immediate availability, distance to travel, shift schedule, or other performance criteria. This may result in deploying too few officers when workload is high and too many officers when it is low. To be sure, the minimum staffing level is often higher than what would be warranted by the agency workload. Ironically, even when the minimum staffing is not workload based, it is not uncommon to hear police officers

suggest that an increase in the agency's workload should warrant an increase in the minimum staffing level.

Minimum staffing levels are sometimes set so high that it results in increasing demands for police overtime. When staffing falls below the minimum standard, police managers typically must hire back officers on overtime to satisfy the minimum staff requirement. It is not uncommon for some agencies to hire back officers nearly every day due to officers taking time off for sick leave, vacations, or other reasons. Additionally, some agencies use a very narrow definition of available staffing. For example, agencies may hire back to fill a vacancy in patrol, even though there are a number of other officers on the street, including those in traffic, school resource units, and supervisors. Inefficiency increases when there are minimum staffing levels on overlapping shifts, leading to a higher number of officers on duty at a time that may not coincide with workload demand.

Most police officers, given a choice, would prefer to have more officers on the street, lending credence to a minimum-staffing model. Nevertheless, increasing the minimum staffing level will not, by itself, improve agency performance or necessarily increase officer safety. In fact, officers hired back to work extra shifts are likely to be fatigued, increasing the risk of injury to themselves or others.

Minimum staffing can also decrease the extent to which an agency can be nimble and flexibly deploy officers based on changing workload demands.

Finally, in some agencies the minimum staffing level may become, by default, the perceived optimal staffing level. In these situations, agencies often use the minimum level as a method to decide, for example, whether an officer can take a benefit day off. Others build work schedules so as to ensure that the minimum level is on duty. In these situations, staffing decisions are based on meeting the minimum level rather than optimizing the available resources to meet workload demand.

The Authorized Level Approach

The *authorized level* approach uses budget allocations to specify a number of officers that may be allocated. Although the authorized level may be determined through a formal staffing assessment, it is often driven by resource availability and political decision-making. The authorized level does not typically reflect any identifiable criteria such as demand for service, community expectations, or efficiency analyses, but may instead reflect an incremental budgeting process.

The authorized level can become an artificial benchmark for need, creating the misperception among police leadership, line staff, and the community that the agency is understaffed and overworked if the actual number of officers does not meet the authorized level. Additionally, unless an agency staffs above the authorized level, fluctuations in recruitment, selection, training, and attrition may lead to the actual staffing levels falling below authorized levels.

Because the authorized level is often derived independently of workload considerations, an agency may be able to meet workforce demand with fewer officers than authorized. Still, the *perception* of being understaffed, resulting when officials bemoan the department operating below authorized strength, can diminish morale and productivity and make it appear that the community is not adequately funding public safety.

The Workload-based Approach

A more comprehensive attempt to determining appropriate workforce levels considers actual police workload. *Workload-based* approaches derive staffing indicators from demand for service. What differentiates this approach is the requirement to systematically analyze and determine staffing needs based upon actual workload demand while accounting for service-style preferences and other agency features and characteristics. The workload approach estimates future staffing needs of police departments by modeling the level of current activity. Conducting a workload analysis can assist in determining the need for additional resources or relocating existing resources (by time and location), assessing individual and group performance and productivity, and detecting trends in workload that may illustrate changing activity levels and conditions. Furthermore, a workload analysis can be performed at every level of the police department and for all key functions, although it is more difficult to assess workload for some units than others. The importance of the workload-based approach to staffing is evidenced by it being codified as a standard (16.1.2) by the Commission on Accreditation for Law Enforcement Agencies: The agency allocates personnel to, and distributes them within, all organizational components in accordance with documented workload assessments conducted at least once every three years.

Unfortunately, there is no universally accepted standard method for conducting a workload-based assessment. Defining and measuring work varies by agency. Knowing that staff decisions are based upon calls for service and the time required to respond to them, officers may not have an incentive to be efficient in their response to calls or even to engage in activities that reduce calls. Learning how to conduct a workload-based assessment may be challenging for police administrators. Typical workload models are complicated and require intensive calculations. They also require decisions on a wide array of issues that are very difficult for officials and communities to make—such as how frequently streets should be patrolled—and do not uniformly account for discretionary activities, such as time for community policing and other officer-initiated activities.

Even with shortcomings, allocation models based on actual workload and performance objectives are preferable to other methods that might not account for environmental and agency-specific variables. Agencies could benefit from a more popularized workload-based methodology of staffing analysis that is easy to learn and comprehend; is employed by administrators; and, importantly, helps to effectively manage discretionary time. No single metric or benchmark should be used as a sole basis for determining an agency's staffing level. Rather, agencies should consider metrics in light of professional expertise

that can place them in an appropriate practical context.

A step-by-step approach for conducting a workload-based assessment should include the following:

1. *Examining the distribution of calls for service by hour, day, and month.* Calls for service can differ by the hour of the day, the day of the week, and the month of the year. Peak call times can also differ by agency. Knowing when peak call times occur can help agencies determine when they must have their highest levels of staff on duty.
2. *Examining the nature of calls for service.* Reviewing the nature of calls can help better understand the work that an agency's officers are doing. Types of police work required can vary by area within a single jurisdiction and require agencies to staff differing areas accordingly.
3. *Estimating time consumed on calls for service.* Determining how long a call takes, from initial response to final paper work, is key to determining the minimum number of officers needed for a shift. This is most straightforward when a single officer handles the call and completes resulting administrative demands (e.g., reports, arrests) prior to clearing it.
4. *Calculating agency shift-relief factor.* The shift-relief factor shows the relationship between the maximum number of days that an officer can work and *actually* works. Knowing the relief factor is necessary to estimating the number of officers that should be assigned to a shift in order to ensure that the appropriate number of officers is working each day.
5. *Establishing performance objectives.* This encompasses determining what fraction of an officer's shift should be devoted to calls for service and what portion to other activities. For example, an agency might build a staffing model in which officers spend 50 percent of their shift on citizen-generated calls and 50 percent on discretionary activities.
6. *Providing staffing estimates.* Staffing needs will, as noted earlier, vary by time of day, day of week, and month of year, among other variables. Agencies should distribute their officers accordingly. For example, a shift with only half the number of calls than another shift will require half the number of officers. These numbers may also vary by the type of calls, and the time and officers they require, in each shift. For example, one large urban agency assigns two officers to each unit in its evening shift, affecting the number of officers needed for units to respond to calls. Another responds to the same type of calls in different ways in different shifts (for example, sending a unit in some shifts, but requesting citizens file a report in person at a station during others).

Following this model we will now describe our staffing analysis for Albuquerque.

We examined data for the period of March 1 2014 – February 28 2015. During that period the department handled 405,404 citizen-generated calls for service (CFS), of which

officers assigned to the area commands handled 383,158. We define these calls as those in which a citizen contacts the police and an officer(s) is dispatched. This category of calls does not include officer initiated activity like traffic stops or department initiated activity like directed patrol.¹

To provide some sense of the magnitude of call demand, consider that 383,158 calls equate to about 1000 CFS per day or the equivalent of 42 calls per hour. The following illustrates CFS by area command. As we can see in Figure four there is significant variation by command. The Southeast Area Command handled 24% of all citizen-generated calls for service, while the Southwest Command handled 12%.

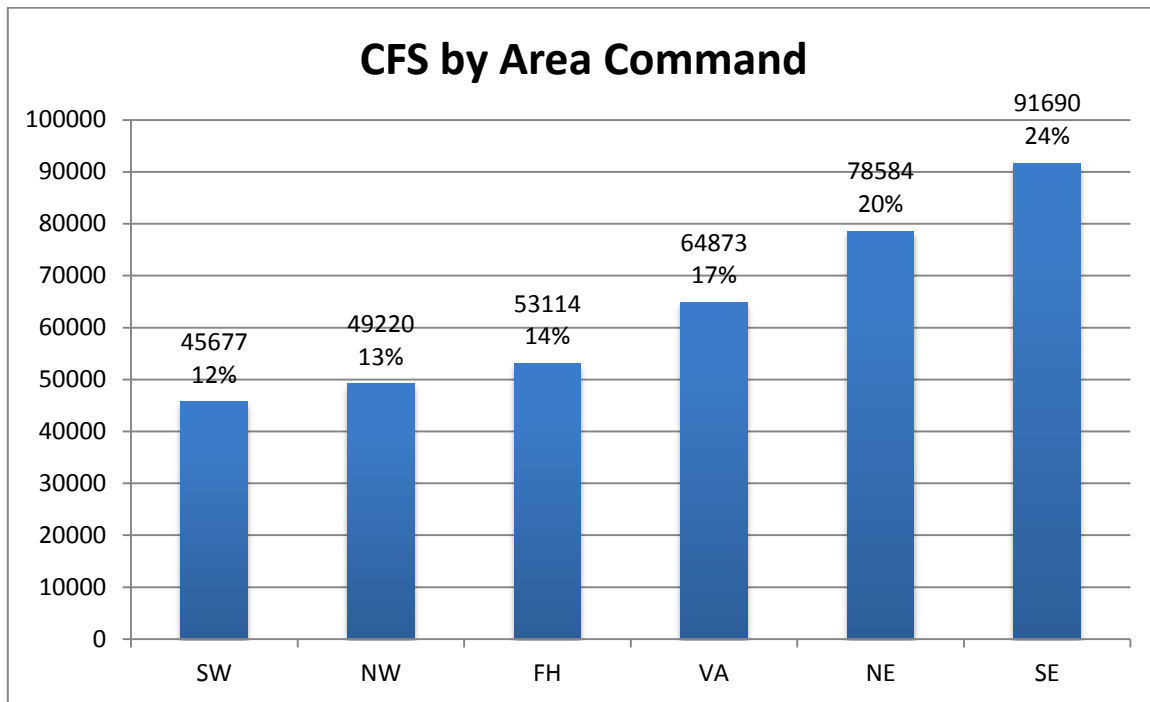


Figure 3 Number of CFS in Each Area Command

¹ It can be difficult to disaggregate citizen-generated calls from others and while there may be some calls in our data that are officer-initiated, we are confident that the data can be used reliably in this analysis.

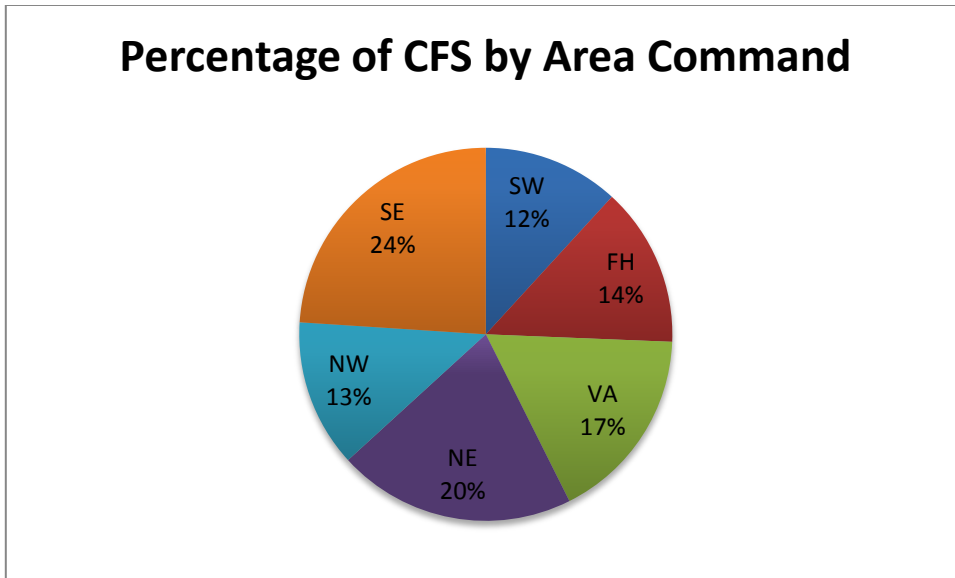


Figure 4 Percentage of CFS by Area Command

Figure 5 illustrates the distribution of citizen-generated calls for service by hour of day for the department. Like most police agencies the peak demand for service occurs in late afternoon hours. We can also observe the drop-off in dispatched calls around the hours of 1500 Hours and 2200 Hours. This is generally consistent with calls having been held pending shift change. This holding of calls, while it can help to reduce overtime and officers working beyond their scheduled time, may have two significant consequences. First, it causes citizens to wait inordinate amounts of time for police response. Second, when officers start their shifts there is a backlog of calls, and thus it contributes to their frustration and tends to reinforce the notion that the department is understaffed.

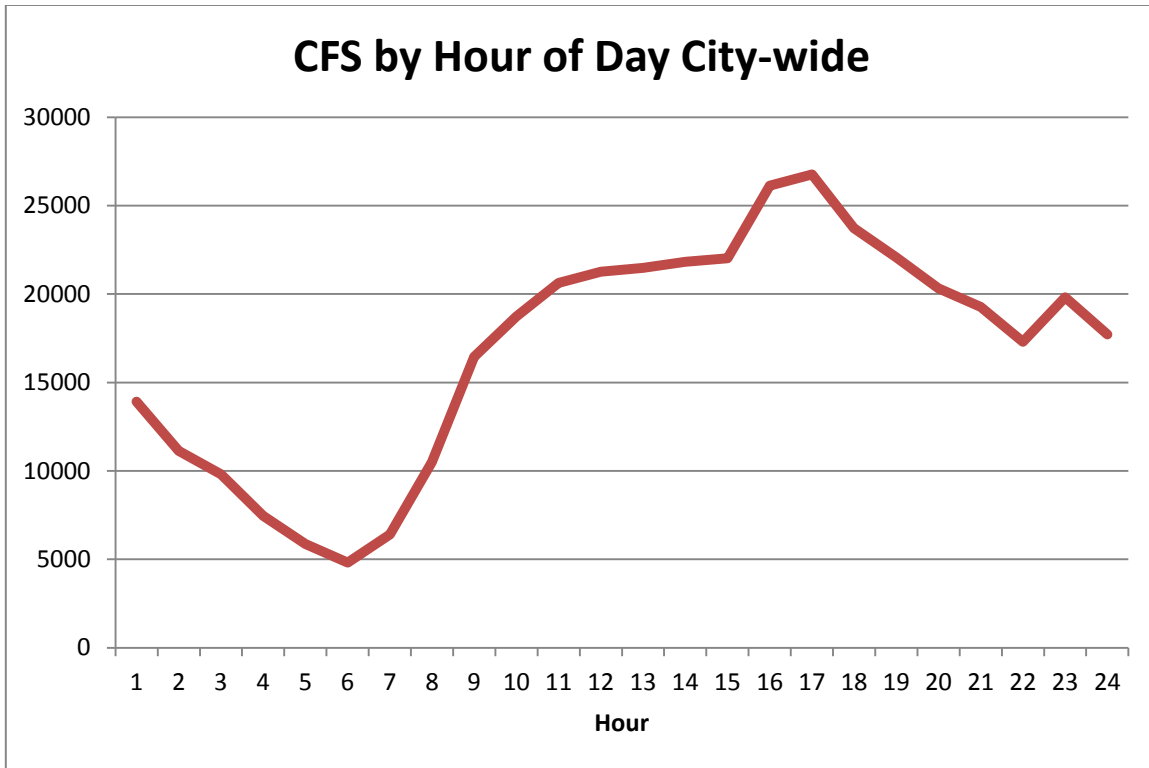


Figure 5 CFS by Hour (City-wide)

In Figure 6 we observe the distribution of calls by hour of day in each of the six commands. Although the number of calls varies by hour, the hourly patterns are similar.

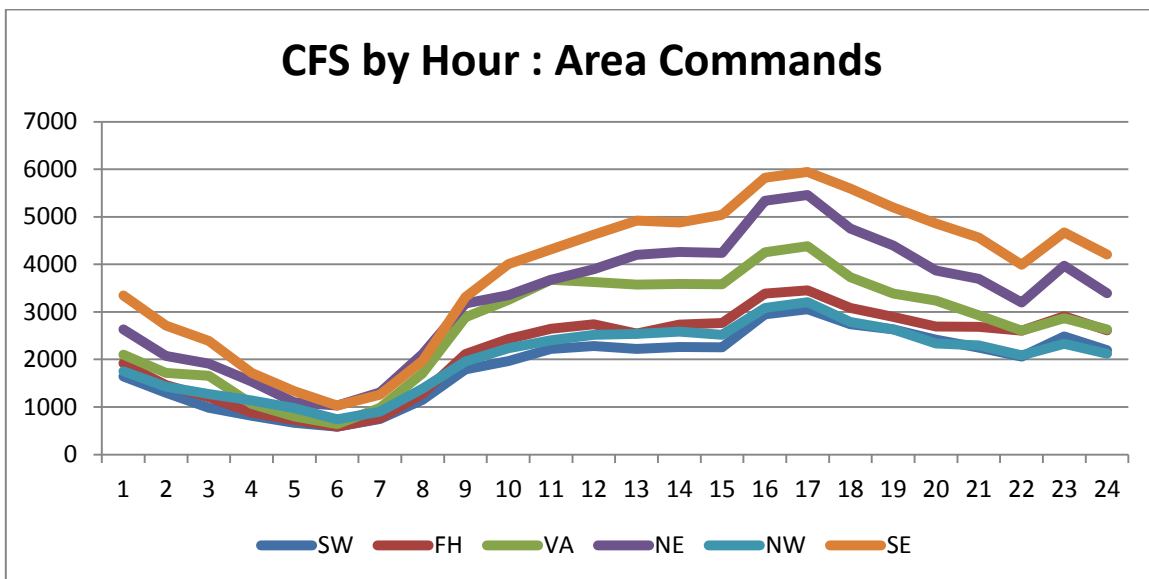


Figure 6 CFS by Hour by Area Command

Figure 7 shows the distribution of calls by day of week. There is relatively little variation by day of week. In fact, we observe that although Friday is the busiest day of the week, it

is not that much busier than the other days. **Nevertheless, on Friday, all of the APD Field Services Bureau personnel are assigned to work.**

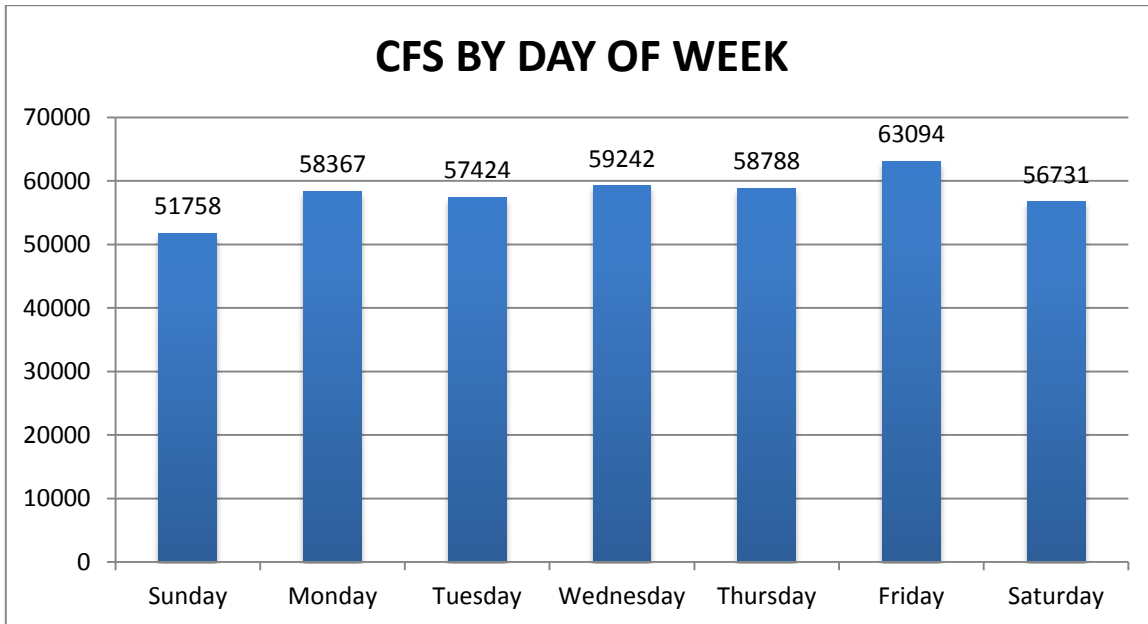


Figure 7 CFS by Day of Week (city-wide)

Next we observe the distribution of calls by month. Again, this is what we expect based on experience with similar agencies.

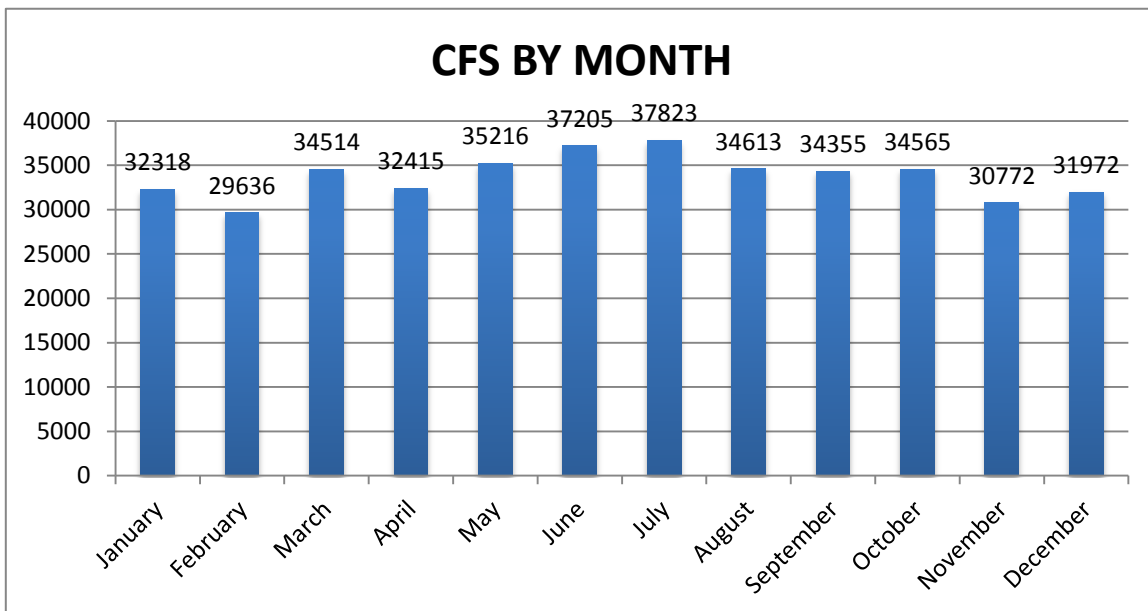


Figure 8 CFS by Month

Finally, we observe the percentage of calls by shift. It is interesting to note the relatively small fraction of CFS activity occurring after midnight.

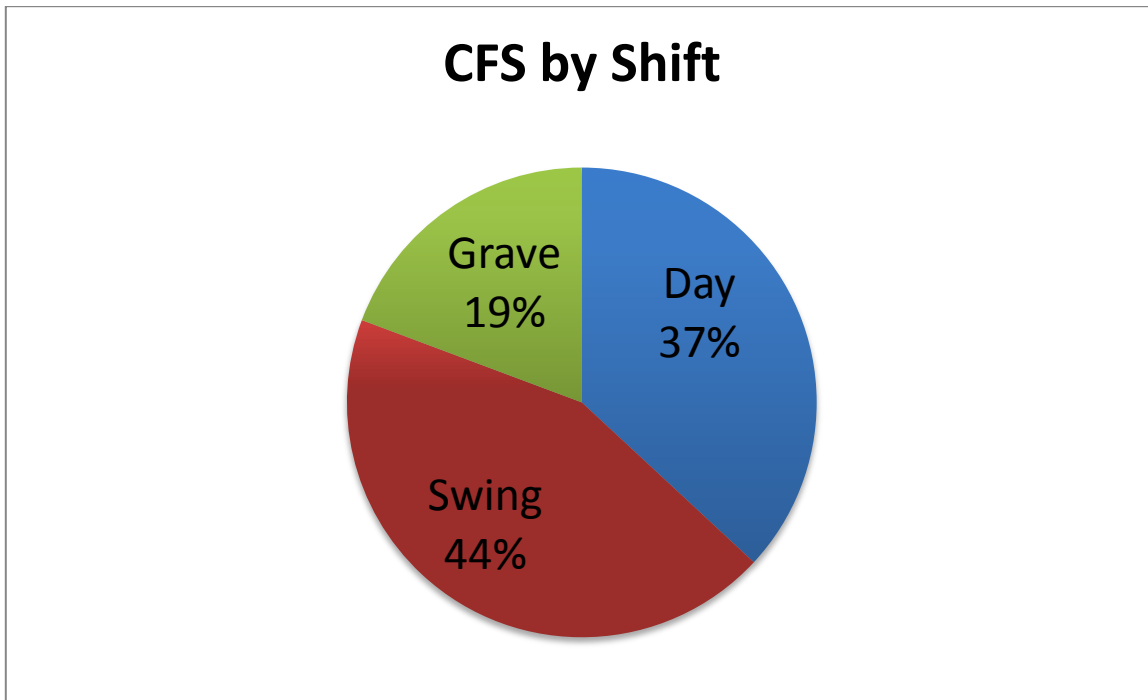


Figure 9 CFS by Shift

The following figure illustrates how we consider time in the context of a call for service.

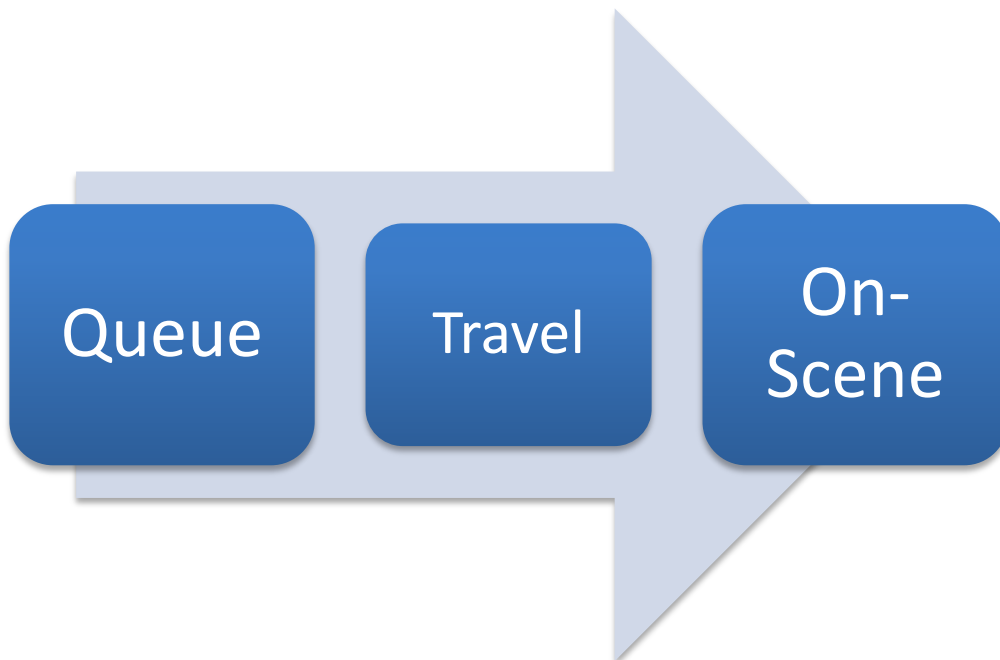


Figure 10 Model of CFS Time

Once a call has been created in the CAD system it is placed in **queue** awaiting dispatch. **Travel time** is the time from when the call is dispatched until the first officer arrives on scene. In our analysis the **time consumed** on the call is reflected by the time from dispatch until the time the last officer has cleared. Table 3 illustrates the average times in each category for APD.

Queue for all Priority One calls	1 Minute, 47 Seconds
Queue (for all calls, average)	14 Minutes 48 Seconds
Travel	8 Minutes 31 Seconds
Dispatch to Clear	48 Minutes 15 Seconds

Table 3 Components of CFS Time (city-wide)

The city has a three priority system for assignment of calls to officers with a priority one (calls with weapons or significant injury or potential for injury) being assigned the highest level, a priority one call. It should be noted each call is evaluated to determine what occurred, how long ago the incident occurred, if weapons were involved and/or if there are injuries. With these factors known, a priority is then assigned to the call and it is entered in to the system and queued for the dispatch of officers.

Our analysis of all three priority types of calls indicated the average time spent on scene of a call for service was 48 minutes and 15 seconds. This call duration is relatively long compared with similar jurisdictions. This may reflect a few factors. First, the Albuquerque area commands cover large geographical areas and thus travel times can be significant. Second, in our experience, when officers face backlogs of calls for service they tend to complete more work at the scene rather than wait and do it later in the shift. Interestingly we found that the travel times and total times were nearly identical across the area commands.

Of particular concern was that all calls requiring the response of an officer are held in queue on average nearly 15 minutes. This figure is a total for all three priorities of calls. This could include calls where a person is reporting a theft of a piece of property from a week ago where immediate officer intervention isn't as critically necessary as well as a call of a violent nature which just occurred (armed robbery). In order to examine this more closely we disaggregated high priority calls and calculated the queue times.

Figure 11 illustrates queue times for high priority (life threatening) calls by area command. These times indicate APD has the capacity to respond promptly to critical calls. **Their performance on this measure is the best we have seen in our studies in other cities.**

Although the average CFS time is about 48 minutes, as we can see in the Figure 12 a substantial fraction of calls takes far less time. In fact 56% of calls consume less than 40 minutes, including travel time.

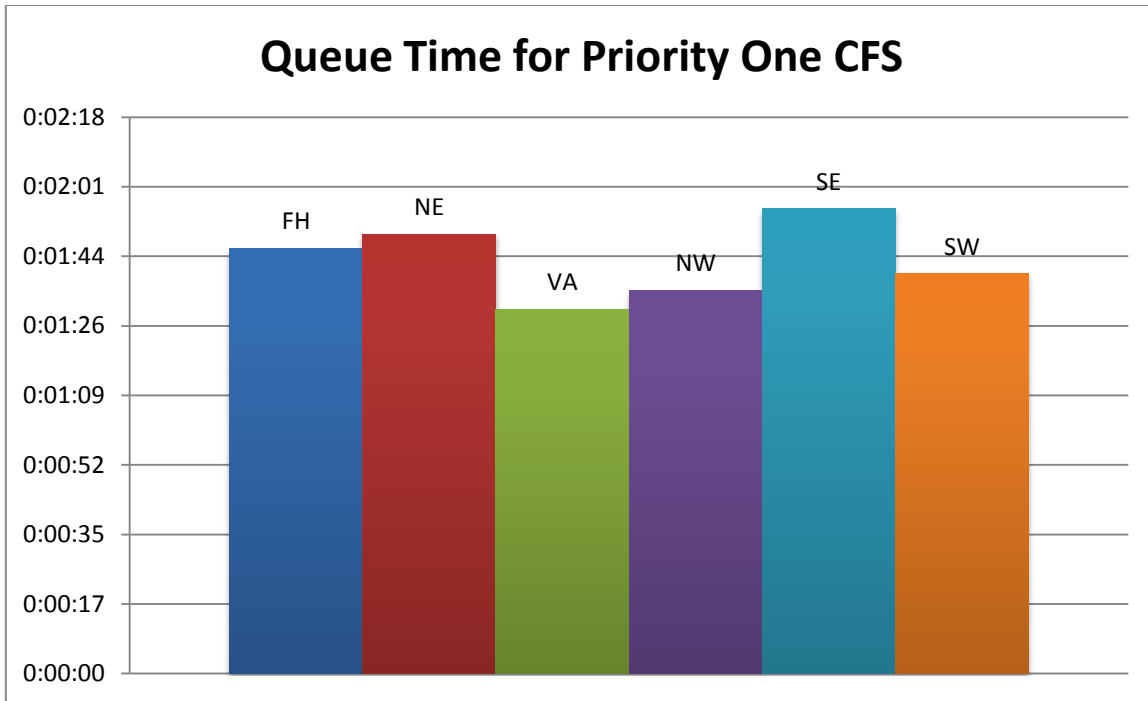


Figure 11 Queue Time for Priority One CFS by Area Command

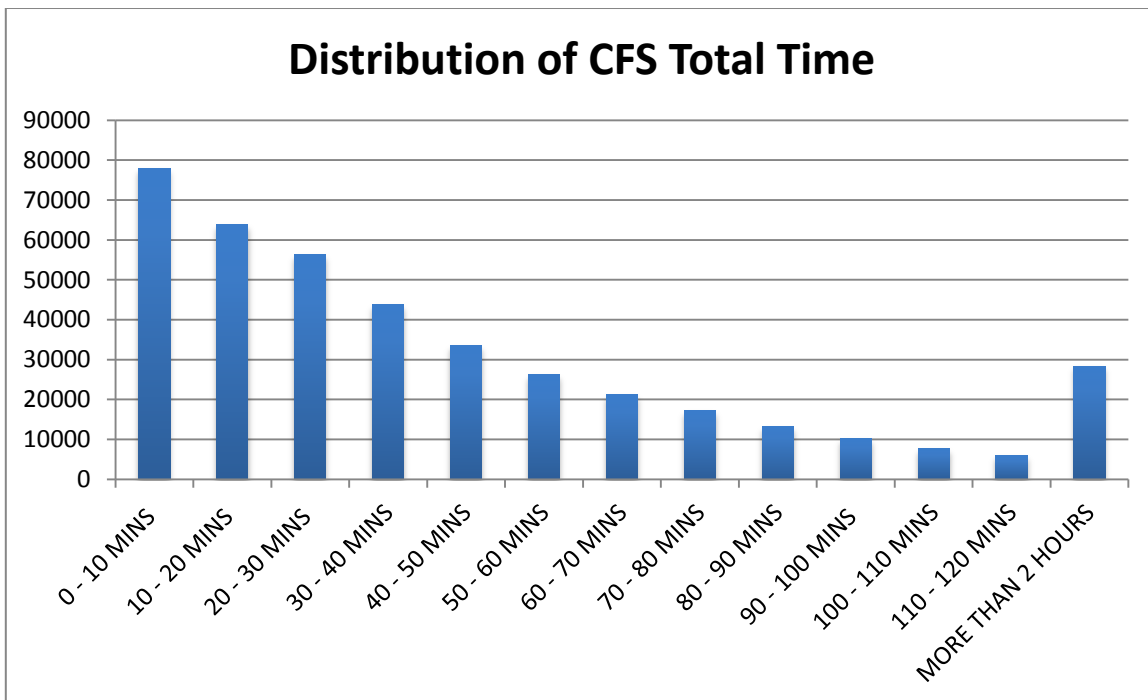


Figure 12 Distribution of CFS Total Time

Next, we examine the nature of calls for service. Table 4 illustrates the top call for service categories. These call types represent 65% of all calls for service in the city.

Type of Call	Number
Suspicious Person/Vehicle	81506
Disturbance	55583
Non-injury Traffic Crashes	28029
Contact	22495
Burglar Alarms	22082
Theft/Fraud/Embezzlement	18798
Family Dispute	17080
P-watch	16970
Direct Traffic	15606

Table 4 Largest CFS by Category (city-wide)

There are several illustrative items in this list:

- There a number of calls that could be reduced through alternative response strategies including alarms, property damage accidents, theft and “contact”.
- Some calls could be handled by non-sworn staff such as property damage crashes or directing traffic.
- P-watch calls are sometimes for informational purposes, and officers will handle them as time permits.

The next step in our staffing estimate is to calculate the shift relief factor. The shift relief factor tells us the number of officers that we need to assign to a shift in order to ensure that a sufficient number of officers are on duty to meet performance objectives. We obtained data for the study period concerning time off for 904.8 FTE sworn personnel. That data is shown in Table 5.

Benefit Time Off	Hours
Birthday	6,682
Hazard Duty	1,740
Holiday	73,598
Jury Duty	8
Military	22,123
Paid Leave	468
Personal Leave	1,116
Sick	52,199
Vacation	93,334
Comp Time	93,970
Float Holiday	1,415
Injury	19,735
Education	184
Total	366,571

Table 5 Summary of Benefit Time Off

In Table 6 we calculated the ratio of the maximum hours they could have worked to the hours worked. That result is 1.74.

Maximum Hours Possible	Benefit Time Off	Regular Days Off	Total Time Off	Total Working	Shift Relief Factor
2642016	366571	754820	1121391	1520625	1.74

Table 6 Calculation of Shift Relief Factor

The shift relief factor tells us how many officers we would have to assign to a shift in order to ensure that a sufficient number were working. For example, if we wanted 10 officers to be on duty during the day shift we would need to assign 17.4 (18) officers to the shift $(10 \times 1.74)^2$.

One of the factors that can influence a staffing model is time spent on preparation of reports. In some communities officers respond to calls for service and prepare their reports while on-scene. As a result, the time for report preparation is included in the total call time. However, if an officer clears the call and prepares the report at a subsequent time that time will appear as a portion of their uncommitted time. In order to capture this data in Albuquerque we looked at the disposition of calls and whether a report was prepared. During our study period a report was written on 24% of calls for service. Thus for the vast majority of calls no additional time is consumed on report writing.

In order to use this staffing model agencies must make two critical decisions. First, the agency must decide whether it is more appropriate to assume that 25% or 50% of calls require a backup. The most reliable choice will be based on consideration of the setting. APD responds to many calls that require backup including alarms, domestic violence, and many traffic crashes. Of course, the incidence of calls that require backup will vary significantly by neighborhood and time of day.

The second decision focuses on the allocation of officer time. We know that police officers do many things other than answer citizen calls for service. Our model includes time for those other activities at various levels. We are often asked whether there is some standard or benchmark that an agency should adopt in this area. In fact, this should be a community-based decision. There are a number of factors that influence that choice:

- Some agencies have a high degree of specialization including traffic, street crime, and tactical units. Those agencies generally have lower expectations about proactive activities by patrol officers than those that are more generalized

² The shift relief factor is based on the assumption that officers work five eight-hour shifts per week. The shift relief factor will be larger for officers that work four ten-hour shifts per week. See section on work schedules.

- Some agencies expect patrol officers to engage in community policing and problem-solving activities. These task can take up a lot of time
- In some agencies there is a philosophy that the principle job for officers assigned to patrol is to answer citizen calls for service and to remain available for emergency response.

Most police executives agree that the key question is not how much discretionary time is available, but how is that time being utilized.

Now we can turn to our staffing estimate. Estimates based on an eight-hour schedule are shown in Tables 7 and 8. Table 7 is based on the assumption that 25% of all calls require a backup unit and Table 8 is based on the assumption that 50% of calls require a backup.³ In all other respects the tables are the same. As you can observe there is a staffing estimate for each area command.⁴

1	2	3	4	5	6	7	8
SW	CFS	25%	ADJCFS	HOURS	UNITS	50%CFS	XSRF
0700-1500	16158	4039.5	20197.5	16158	5,5	11.1	20.0
FH							
0700-1500	19255	4813.8	24068.8	19255	6.6	13.2	23.0
VA							
0700-1500	25895	6473.8	32368.8	25895	8.9	17.7	31.0
NE							
0700-1500	28930	7232.5	36162.5	28930	9.9	19.8	35.0
NW							
0700-1500	18135	4533.8	22668.8	18135	6.2	12.4	22.0
SE							
0700-1500	33062	8265.5	41327.5	33062	11.3	22.6	40.0

Table 7 Staffing Estimates (25% Backup)

³ It is very difficult to obtain reliable data about backup units from CAD Data, so we estimate that value.

⁴ APD has requested that the patrol allocation be based on the assumption that 25% of calls on the day shift require a backup and that 50% of calls on the afternoon and midnight shifts require a backup.

Albuquerque Police Department
Staffing Study

1	2	3	4	5	6	7	18
SW	CFS	50%	ADJCFS	HOURS	UNITS	50%CFS	XSRF
1500-2300	20587	10293.5	30880.5	24704.4	8.5	16.9	30
2300-0700	8932	4466	13398	10718.4	3.7	7.3	13
FH							
1500-2300	23708	11854	35562	28449.6	9.7	19.5	34
2300-0700	10151	5075.5	15226.5	12181.2	4.2	8.3	15
VA							
1500-2300	27386	13693	41079	32863.2	11.3	22.5	40
2300-0700	11593	5796.5	17389.5	13911.6	4.8	9.5	17
NE							
1500-2300	34679	17339.5	52018.5	41614.8	14.3	28.5	50
2300-0700	14975	7487.5	22462.5	17970	6.2	12.3	22
NW							
1500-2300	20762	10381	31143	24914.4	8.5	17.1	30
2300-0700	10323	5161.5	15484.5	12387.6	4.2	8.5	15
SE							
1500-2300	40643	20321.5	60964.5	48771.6	16.7	33.4	59
2300-0700	17984	8992	26976	21581	7.4	14.8	26

Table 8 Staffing Estimates (50% Backup)

In the first column of Tables 7 and 8 we have divided the day into 3 eight-hour shifts (day shift for Table 7 and swing and midnight shifts for Table 8). You will note the number of calls during each shift in column 2. In the third column we make the backup unit adjustments (adding 25 and 50% of calls respectively). Column 4, which includes the backup unit adjustment, is the basis for our analysis. In Column 5 we estimate the total time consumed on calls (in hours) by shift. In the next column we identify the number of units required to handle these calls if a unit worked every day and 365 days per year. This calculation is based on the total time consumed divided by 2920, the number of hours that an officer would work if they worked an eight-hour shift every day. **The unit value (Column 6) is the number of officers that should be on duty if they only answered calls for their entire shift, and if they worked every day.**

Next (column 7) we multiply the unit value times the performance objective. In this case the model is based on providing enough officers to permit them to spend 50 percent of their time on calls for service and fifty percent on other activity.

In column 8 we multiply the required units times the appropriate shift relief factor. This tells us the number to **assign** to the shift in order to ensure that the appropriate number of units were on duty.⁵

⁵ The convention is to round up at this point.

Using these tables we can estimate staffing requirements for each area command by shift. This analysis is illustrated in Table 9. Based on this model APD would require 522 police officers assigned to patrol.

8 HOUR WORK SHIFT ANALYSIS

SW	
0700-1500	20
1500-2300	30
2300-0700	13
FH	
0700-1500	23
1500-2300	34
2300-0700	15
VA	
0700-1500	31
1500-2300	40
2300-0700	17
NE	
0700-1500	35
1500-2300	50
2300-0700	22
NW	
0700-1500	22
1500-2300	31
2300-0700	15
SE	
0700-1500	40
1500-2300	59
2300-0700	26
Total	522

Table 9 Staffing Estimates for Area Commands

When using the workload-based approach it is important to consider some of the potential limitations. First, this model relies heavily on averages in producing the estimates. To the extent that workload demands exceed averages, relying on averages for scheduling may affect agency performance. An example of where this might occur is during substantial emergencies, concurrent major calls, or some unplanned event. In these sorts of unpredictable situations, the workload-based model, like other approaches, may not provide for an adequate number of officers. The main effect of this shortfall will be to reduce the availability of discretionary time. Second, the models do not

differentiate about the job functions of the police units. That is, we assume that calls are handled by police officers. To the extent that calls are handled by supervisors or by non-sworn staff, officer-staffing requirements will diminish. Third, we include the response time as a component of the call for service time, which we believe is reliable in most communities. In communities with large geographical patrol zones, agencies may find that even when officers are available for calls for service, travel time to answer calls exceeds that needed to provide acceptable performance. In these agencies it is important to consider re-designing patrol zones to ensure that officers can respond to calls appropriately.

Finally, it is important to note that the workload-based approach works best when a community responds to at least 15,000 citizen-generated calls per year. Otherwise, the time required for calls for service is so low that the number of officers recommended is far fewer than is thought reasonable. While this is generally not an issue in large communities, we do see some evidence of this problem in the APD analysis. For example, several areas had fewer than 15,000 calls on the midnight shift, and as a result, the staffing estimates may be unreasonably low. It is important for the agency to utilize its institutional knowledge to address these anomalies.

One approach to addressing this problem of inadequate staffing on midnight shifts is to adopt a 12 Hour work schedule.⁶ By staffing on two shifts rather than three or more you can introduce some efficiencies and having a more balanced staffing by shift.

⁶ See page 31 for a discussion of twelve-hour work schedules.

Using the APD workload data we constructed a staffing table based on two twelve-hour shifts starting at 0600 Hours and 1800 Hours. It is shown below.

12 HOUR WORK SHIFT ANALYSIS

1	2	3	4	5	6	7	8
SW	CFS	ADJ	ADJCF5	HOURS	UNITS	50% Obl.	XSRF
0600-1800	25645	6411	32056	25645	5.9	11.8	31
1800-0600	20032	10016	30048	24038	5.5	11	29
FH							
0600-1800	29938	7485	37423	29938	6.8	13.6	36
1800-0600	23176	11588	34764	27811	6.4	12.8	34
VA							
0600-1800	39244	9811	49055	39244	9	18	47
1800-0600	25629	12815	38444	30755	7	14	37
NE							
0600-1800	45785	11446	57231	45785	10.5	21	55
1800-0600	32799	16399	49198	39358	9	18	47
NW							
0600-1800	28108	7027	35135	28108	6.4	12.8	34
1800-0600	21112	10556	31668	25334	5.8	11.6	31
SE							
0600-1800	51683	12921	64604	51683	12	24	63
1800-0600	40007	20000	60007	48006	11	22	57
Total							501

Table 10 Staffing Estimates for 12-Hour Shifts

This model is very similar to the one used for the eight hour schedule with a few exceptions:

- We assumed that 25% of calls on day shift required backup and 50% on night shift required backup. In the eight-hour model we were assuming 50% backup for 16 hours per day-in this one 12 hours per day.
- We have utilized a shift relief factor of 2.6 (typical for 12 hour schedules) however it should be noted that 12-hour schedules result in a 42-hour workweek. The actual shift relief factor will vary based on how the department adjusts for that anomaly.

Based on these assumptions APD would require **501 officers in patrol**.

Work Schedule

The second component of patrol resource analysis is the work schedule. The work schedule is critical because it is a tool to ensure that resources are aligned with organizational objectives.

Our work in Albuquerque suggests that patrol performance is significantly affected by work schedule. Among the critical issues are:

- Work schedules are not well aligned with the workload
- There are several different work schedules in use, resulting in unnecessary complexity
- In some cases work schedules were implemented to motivate police officer performance. While this may have been beneficial for the officers, it appears that these schedules are not based on deployment requirements.

In order to better understand these issues it is instructive to review the scheduling process.

Police work schedules come in all shapes and sizes. Although each seems unique there is a methodology to apply so that we can compare work schedules. Among the important components of a work schedule are:

- Average work week
- Shift length
- Number of consecutive work days
- Weekend time off
- Staffing by day of week.
- Percentage of officers on duty each day.

Consider the following figure that illustrates a common work schedule.

	S	M	T	W	T	F	S
1	Off	Off					Off
2		Off	Off				
3			Off	Off			
4				Off	Off		
5					Off	Off	
6						Off	Off
7	Off						Off
% On	71	71	71	71	71	71	71

Figure 13 Example of 5-2 Work Schedule

Figure 13 illustrates a work schedule in which officers work a five-day on/two-day off schedule with eight-hour days. We observe that the shift has unique properties:

- Fixed days off
- Three groups of officers have either a full or partial weekend day off
- Equal staffing by day of week
- Longest on duty cycle is five days.

Importantly, we observe that on every day, 71 percent of the officers are assigned to be on duty, and that the number of officers on duty each day is the same. These are two very important criteria that can be used in evaluating a work schedule.

Figure 14 shows how we can build a schedule that increases staffing on weekends. Let’s say we have a workgroup with nine officers and we wish to provide staffing proportional to the daily workload. Each officer is assigned a day off group, but groups two and three each have two officers. This allows the reduction of staffing on some days, and the increase on others. This schedule is particularly attractive to employees that want fixed days off. It works well for officers that are going to school, and may be beneficial for those that assist in childcare. The disadvantage is that a substantial portion of employees never gets a weekend off.

	S	M	T	W	T	F	S
1	Off						Off
2 (2)		Off	Off				
3 (2)			Off	Off			
4				Off	Off		
5					Off	Off	
6						Off	Off
7	Off	Off					
On	7	6	5	6	7	7	7
Off	2	3	4	3	2	2	2
% On	77%	66%	55%	66%	77%	77%	77%

Figure 14 Example of 5-2 schedules with variable staffing by day of week

Another schedule that is based on an eight-hour day is commonly described as a “six and two” schedule. Over the course of the seven-week duty cycle each officer will work the following pattern:

- 6 on 3 off
- 5 on 3 off
- 6 on 2 off
- 6 on 2 off
- 6 on 2 off
- 6 on 2 off

It is illustrated below.

Week	S	M	T	W	TH	F	S
1			Off	Off			
2				Off	Off		
3					Off	Off	
4						Off	Off
5	Off						Off
6	Off	Off					
7		Off	Off				
% On	71	71	71	71	71	71	71

Figure 15 6/2 Work Schedule

This schedule has several interesting attributes:

- The percentage of officers assigned each day is the same as a 5/2 schedule
- Rotating days off
- Each officer gets two three-day weekends during each duty cycle.

Ten- Hour Shifts

More than 30 years ago, several law enforcement agencies began adopting the “4–10” plan. Under this plan, officers work four 10-hour shifts and have 3 days off each week. The plan appeals to officers because it reduces the number of days worked, the likelihood of working on a holiday, and commuting time. The plan can also appeal to agencies. Because the work schedules have an “overlap” period between shifts, when officers on two shifts are working, the agency can double staffing during peak demand times. The following figure illustrates a typical 4/10 plan; one that is based on a seven week duty cycle.

	S	M	T	W	T	F	S
1	OFF	OFF					OFF
2	OFF	OFF	OFF				
3		OFF	OFF	OFF			
4			OFF	OFF	OFF		
5				OFF	OFF	OFF	
6					OFF	OFF	OFF
7	OFF					OFF	OFF
%	57	57	57	57	57	57	57

Figure 16 4-10 Plan

Compared to 8-hour shifts, the above 10-hour schedule significantly reduces the proportion of officers assigned to be on duty; dropping from 71% to 57%. This happens

because the agency must use the same number of officers that are used to provide 24 hour staffing to provide 30 hours of staffing a day. In many agencies, those additional 6 hours of coverage are unnecessary. Moreover, 10-hour shifts require additional police vehicles to cover overlap times, which may reduce productivity for some officers.

Consider the following example. A department has 84 officers assigned to patrol (28 officers are assigned to each eight-hour shift). On each shift we would expect about **20 officers** (71%) to be assigned to duty.

The department decides to implement a 4/10 plan with shift times of 0600 to 1600, 1400 to 2400, and 2200 to 0800. If we continue to assign 28 officers to each shift we would expect that on each shift **16 officers** (57%) would be assigned to work. The resulting deployment scheme is illustrated below.

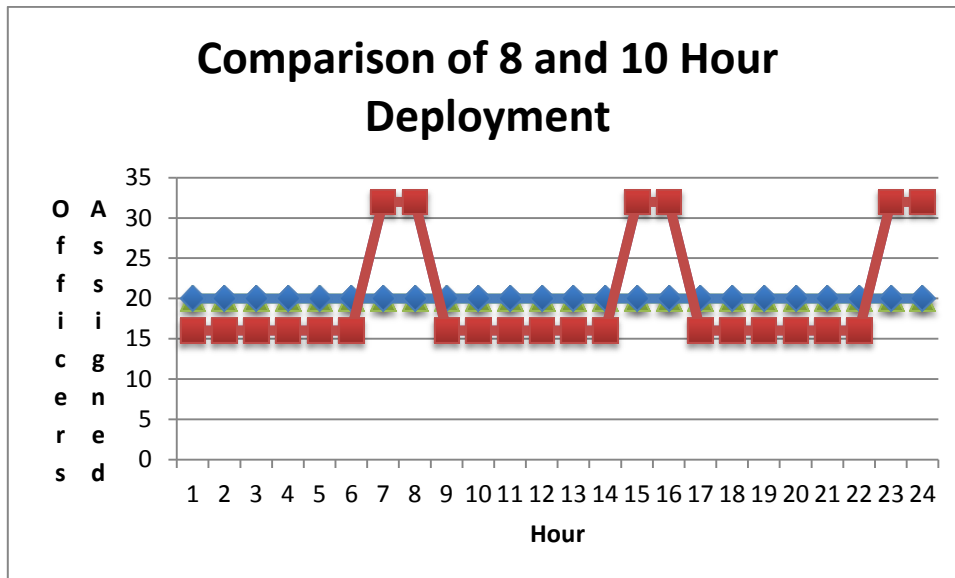


Figure 17 Comparison of 8 and 10-hour deployment

In Figure 17 we observe what happens when we shift from an eight-hour to a 10-hour work schedule with the same number of officers. The blue line depicts the eight-hour schedule. As we see, except for the six hours of overlap when the staffing doubles, there are fewer officers assigned than when officers are working eight-hour shifts. The only way to reach the level of staffing provided under the eight-hour scheme is by adding officers. Importantly, it may be the case that an agency can use the additional capacity that comes from the ten hour plan to its advantage, but they must understand that any advantage it experiences may be at the expense of another goal.

APD Field Services uses two different work schedules. Officers on the day shift and swing shift work a 5 on, 2 off eight-hour day schedule with fixed days off. Officers on the graveyard shift work a 4 on, 3 off schedule with ten-hour days with fixed days off.

First, let's examine the eight hour schedule.

	M	T	W	T	F	S	S
SQUAD1						OFF	OFF
SQUAD2	OFF	OFF					
SQUAD3			OFF	OFF			
% ON	66	66	66	66	100	66	66

Figure 18APD Work Schedule (Day and Swing Shift)

This schedule has three critical attributes. First, as we can observe one third of the officers get every weekend off, while the others never do. Second, on six days of the week 66% of officers are assigned to work-a five percent reduction in productivity as compared to a more traditional 5 on 2 off schedule. Finally, we observe that on Friday the entire shift is scheduled to work.

Next we examine the 4/10 plan used on the graveyard shift. Figure 19 illustrates the distribution of personnel (23 officers) in the Valley Area Command.

OFFICERS	M	T	W	T	F	S	S
4					OFF	OFF	OFF
5	OFF					OFF	OFF
5		OFF	OFF	OFF			
2			OFF	OFF	OFF		
4	OFF	OFF					OFF
3	OFF	OFF	OFF				
ON DUTY	11	11	13	16	17	14	10
OFF DUTY	12	12	10	7	6	9	13
% On Duty	48	48	57	70	74	61	43

Figure 19 APD Graveyard Shift Work Schedule

This schedule has also has unique aspects. First, we observe that 13 officers (57%) get either a full or partial weekend off. Second, we observe that there is proportional staffing by day of week but it is not well aligned with the workload. For example, there are considerably more officers assigned to work on Thursday than Monday or Tuesday. Finally, proponents of the 4/10 plan often tout the benefit of the overlap coverage. In the APD schedule the overlap occurs between the hours of 2200 and 0000, clearly not the busiest time. Moreover, it is important to note that an officer scheduled to work on Friday actually begins work at 2200 Hours on Thursday, so the department's biggest deployment under this schedule is on Wednesday and Thursday nights. **We recommend that APD abandon the use of 10 hour shifts unless the unit assigned to that schedule is providing 10 or 20 hours of service per day.**

Twelve-Hour Shifts

One of the most interesting recent changes in police work scheduling has been the widespread adoption of the 12-hour shift. Hundreds of agencies have adopted this approach, and the number of implementations continues to increase. Evidence, both anecdotal and more systematic, suggests that this approach can be highly effective⁷. One of the advantages for such a schedule is that it would eliminate the inefficiency of the 10-hour schedules currently in use.

The twelve-hour schedule is relatively straightforward. It is a fourteen-day duty cycle. The pattern consists of: 2 days on / 2 days off, 3 days / 2 days off, 2 days / 3 days off. This schedule results in a 42-hour average workweek. Over the two-week cycle officers would earn four additional hours. All officers are assigned to one of two groups. This schedule makes it easier for supervisors and officers to work on the same schedule. A typical work schedule is illustrated below.

	Su	M	T	W	T	F	Sa
One				Off	Off		
Two	Off	Off	Off			Off	Off
% On	50	50	50	50	50	50	50

Table 11 Example of 12 Hour work schedule

As can be seen, officers have rotating days off during the duty cycle, but the pattern is repeated every two weeks. Thus, an officer could expect, for example, to have every other Monday and Tuesday off. Officers assigned to this pattern would have every other weekend off.

At first glance it looks like 12-hour shifts actually reduce resource availability, but recall that the agency need only staff two shifts per day. Staffing 7 officers on 12 hour shifts is equivalent to staffing 10 officers assigned to eight hour shifts.

Twelve-hour shifts, while growing in popularity, do have several disadvantages including:

- Officers engage in more outside activities
- Officers are more willing to live farther from the community
- The potential of more off-duty court time
- More difficult to schedule training
- Greater fatigue/ lower productivity

⁷ A Look at the 12-Hour Shift: The Lincoln Police Department Study. Captain Jon Sundermeier, Lincoln, Nebraska, Police Department. *The Police Chief*. March 2008.

- Uniform staffing by day of week and by shift
- Fewer works days per officer per year
- More difficult to maintain communications
- Results in 42 hour average work week

There are a number of advantages to this approach:

- Two shifts instead of three-easier to administer
- Fewer shift changes
- More days off per year
- More time for outside activities
- Fewer trips to and from work
- Less overtime
- Less sick leave
- Greater productivity
- Easier supervision

Agencies that adopt 12-hour work schedules are particularly concerned about fatigue. The evidence on this issue is mixed. On its face a 12-hour shift seems very long and one could easily predict an increase in accidents and injuries related to fatigue. However, the schedule does provide significant amounts of time off, and most agencies that adopted this approach have not experienced those anticipated increases. In fact, most agencies report that officers on 12-hour schedules use less sick time, and have lower levels of stress and illness.

The key to successful implementation is effective management of off duty time, particularly during the 12-hour break between consecutive days on duty. It is critical that officers get sufficient rest during their time off. For the department that means closely monitoring off-duty employment, court, and other obligations that may diminish the opportunity for sleep.

Managing the Demand for Police Services

Much of our discussion to this point has focused on supplying enough police officers to meet citizen demands for service. Now we examine ways in which APD can more effectively manage demand.

Reducing Calls for False Alarms

During our study period APD responded to the 22082 burglar alarms. If we use an average CFS time of 30 minutes and assume that two officers are required for these calls, this equates to roughly 22,000 officer hours are consumed responding to alarms, the vast

majority of which are false. APD officers work, on average 1680 hours per year. Thus, the department consumes the equivalent of 13 FTE just to answer alarm calls.

Nationwide, police departments respond to millions of false alarms annually at a cost that tops \$1 billion. In cities for which we have data, 90 to 99 percent [of these alarms] are false. False alarms are a wasteful use of police resources and a problem that many law enforcement agencies struggle to manage. "Solving the problem of false alarms would by itself relieve 35,000 officers from providing an essentially private service." Moreover, an alarm signal is NOT an indicator of a criminal activity; in most instances, it is designed to detect motion, including "human error, system malfunctions and abnormal conditions, most of which have little to do with crime." Police departments and the municipalities that finance their needed services can realize significant savings and increase productivity by reducing this often unproductive use of officers' time.⁸

Many communities are taking an aggressive approach to reducing response to false alarms. For example, the Milwaukee Police Department implemented the Verified Response Policy for burglar alarms in September 2004. Under this policy, the Milwaukee Police Department does not respond to the report of a burglar alarm activation that was not first verified by a Private First Responder Service. Milwaukee reduced the number of calls for service due to alarms from more than 30,000 to 620 in 2012 as a result of their policy change.

In 2008, the San Jose Police Department conducted a study of false alarms and found that over 98% of all alarm calls were false alarms. The cost of these false alarms to the Department was \$662,000. A subsequent study in 2010, revealed 12,450 alarm responses resulted in only two arrests and 113 police reports.

As a result of this research, San Jose adopted a Verified Response Protocol on January 1, 2012, and no longer responds to alarms solely on the request of alarm monitoring companies. The police will continue to respond to panic and robbery alarms. The department will also respond to "verified" alarms. Verification may come in the form of sound, video, or eyewitness accounts that indicate a crime is occurring and thereby constituting a "verified" response. Alarm verification can also be accomplished when an alarm company agent, property owner or any witness is at the scene of activation and affirms that police are needed because a crime is occurring or has occurred.⁹

⁸ Opportunities for Police Cost Savings Without Sacrificing Service Quality: Reducing False Alarms. Philip S. Schaenman, Aaron Horvath, Harry P. Hatry, The Urban Institute, January 2013

⁹ http://www.sjpd.org/Records/Verified_Response.html

Alternative Responses to Traffic Accidents

During our study period APD area command officers investigated 28,000 property damage only traffic crashes. Traffic accident investigation is a labor-intensive task, often involving more than one officer. Moreover, when vehicles are in the roadway (including emergency vehicles) it causes traffic delays and increases the risk of secondary collisions.¹⁰

Many police departments are revising their policy with respect to minor traffic accidents. In Minneapolis, for example, officers respond to the scene and ensure that no one is injured, that there are no DUI's and that the participants are willing to exchange information. If the crash meets these criteria the officer provides a packet of information and forms for the drivers to complete.

In Philadelphia, police do not investigate crashes in which:

- There are no personal injuries, and no damage to physical property surrounding the accident, such as commercial, residential or government-owned property (damage is associated with vehicles only)
- All vehicles may continue to be driven safely from the scene of the accident
- All drivers remain at the scene of the accident and agree to exchange owner/vehicle information.

Philadelphia drivers can report the auto accident in person at the police district office where the crash occurred or on the phone. After reporting the accident, they receive a "District Control" (DC) number, or accident record number, and can contact their insurance carrier with the DC number.

The San Diego Police Department responds only to injury and hit-and-run accidents. If it is a minor hit-and-run, drivers may be directed to the nearest police substation to complete a report. If it is a property damage accident, drivers exchange information with the other driver.

Finally, since 2014 the Las Vegas Metropolitan Police Department no longer investigates or prepares reports on non-injury accidents. It is the responsibility of the drivers in the collision to exchange identification and insurance information. Metro still responds to other types of accidents including:

- Accidents with injuries or fatalities;
- A driver under the influence of alcohol, narcotics or other substances;

¹⁰ Albuquerque encourages drivers to move crash vehicles from roadway. Thus the value of the officer investigation is limited.

- A driver who doesn't have a driver's license, proof of insurance or registration;
- A hit and run;
- A vehicle disabled on the roadway as a result of an accident; an
- An uncooperative driver (i.e. will not exchange information) or any other disturbance meriting a police response.

Web-based Crime Reporting

APD is currently using a Telephone Reporting Unit (TRU) to take citizen crime reports by phone. TRU handles the following types of incidents:

- Auto Burglary
- Auto Theft
- Larceny
- Lost Items (i.e. cell phones, purse)
- Vandalism/Graffiti
- Runaways
- Simple Assault and Battery
- Harassment/Threats
- Embezzlement
- Indecent Exposure
- Fraud/Forgery

The APD also employs an on-line reporting system that permits the reporting of the following offenses:

- Lost Property
- Vandalism
- Vandalism of a Vehicle
- Theft/Larceny
- Auto Burglary
- Telephone Harassment

In our view APD could do more to increase the use on citizen self reports. First, the department should ensure that the web-based system mirrors the TRU. Second, the department should examine the policy and procedure that is used to screen TRU calls. We were informed by a number of members of the organization that TRU call takers often refuse to take a report claiming they cannot take a report when the suspect is known. This occurs even when the victim provides the scantest of suspect information. Ironically, the criteria for this parameter for self-reporting on-line is "You know who committed the crime." This is a much more reasonable standard.

One additional advantage to the on-line approach is that the victim receives a report number immediately and prints a copy of a report. This is better for citizens and reduces demand on the records division. We recommend that the department transition away from a telephone based system to a web-based system.

Operations Support Staffing

This section of the report examines the assignment and utilization of resources currently committed to specialized units within the department. When analyzing the staffing for specialized or support units, it is important to note that there is no universally accepted “one size fits all” formula for police departments. Rather, the evaluation must be based on a number of factors such as:

- The agency’s policing philosophy
- The agency’s policies and procedures defining the roles and responsibilities of support units
- The availability of alternative resources to provide equivalent services currently being provided by the support and specialized units
- The effectiveness of the support and specialized units
- Community expectations
- City and police department budgets and resources
- Collective bargaining agreements

Investigative Bureau

A deputy chief leads the investigative bureau. There are five divisions in the bureau:

- Special Investigations
- Criminal Investigations
- Scientific Evidence Division
- Property Crimes Division
- Real Time Crime Center

APD employs a combination of centralized and decentralized approaches to managing criminal investigations. Each area command is assigned investigators. They are referred to as “impact” officers. These officers do both proactive work under the direction of the area commander and investigate cases that have not been assigned to investigative units.

APD Policy 2-24 describes the procedures to be followed by a field service officer:

A. Preliminary Investigations

- 1. Field Services officers will conduct preliminary investigations on all felony and misdemeanor crimes and any other incidents of a suspicious nature.*

2. *Field Services officers will determine the exact nature of the call and either begin a preliminary investigation or call out a specialized unit.*
3. *Field Services supervisors will be dispatched to the following:*
 - a. *Fatal and Serious Accidents*
 - b. *Accidents Involving Police Vehicles*
 - c. *Pursuits*
 - d. *Violent Crimes*
 - e. *Unattended Death*
 - f. *Suicide*
 - g. *Serious Injury*
 - h. *Hostage/Barricaded Subject/Sniper Situations*
 - i. *Hazardous Materials Incidents*
 - j. *Use of Force*
 - k. *Injury to an Officer*
 - l. *Riots/Civil Disorders or other Major Incidents*
 - m. *When Requested by an Officer*
4. *In the event that a case is assigned to a specialized unit, the primary officer called to the scene will write the initial offense/incident report. The last sentence of the narrative will indicate the officer and/or specialized unit the case was assigned to.*

In most cases, the officer, in conjunction with their supervisor will decide whether the case will be assigned to a specialized unit and whether or not the specialized unit should respond to the scene.

The policy also mandates that the primary field services officer “will submit a copy of the original offense report and all related documents to the assigned detective by the end of shift.” During our interviews several senior level managers gave differing interpretations of which unit (Investigative Bureau of Area Commands) had the primary responsibility for follow-up.

It is interesting to note that the decision about who will be assigned to follow up a case lies with FSB, and that it is incumbent upon FSB to forward cases to the appropriate unit for follow-up. We were told that on occasion this does not occur in a timely manner. That is, sometimes a case has not been forwarded to investigators and they only learn about it later when they are reviewing cases in the information management system.

Not only is there some uncertainty about how cases are assigned to specialized units, there is no policy that describes how cases are assigned to detectives for follow-up, nor is there any policy or procedure to manage the timely completion of investigations. The department does not use a formal system of case management based on solvability or

seriousness, a strategy widely employed in agencies across the country.¹¹

Another remarkable aspect of the Investigative Bureau is that a very small fraction of the detectives work at night or weekends. Moreover, there is relatively little use of detectives assigned to one division to support the work of another.

Special Investigation Division

The SID has three sections each headed by a lieutenant:

- Career Criminal Section
 - Gangs (1 sergeant, detectives)
 - Criminal Intelligence Unit (1 sergeant, 3 detectives)
 - Joint Terrorism Task Force (1 detective)
 - Investigative Support (1 sergeant, 5 detectives)
- Narcotics
 - Central Narcotics (1 sergeant, 7 detectives)
 - Meth Unit (1 csa., 1 detectives)
 - Vice (1 sergeant, 3 detectives)
 - Air Support (1 sergeant, 4 police officers)
- HIDTA
 - FBI Safe Streets (2 detectives)
 - DEA Task Force (3 detectives)
 - HIDTA Region 1 (3 (non-sworn)
 - HIS Task Force (1 sergeant, 3 K-9 officers)

Most of the activity performed by these units is proactive in nature, and is based either on intelligence information, citizen complaints, or projects conducted in cooperation with area commands. There is a high degree of cooperation and collaboration with federal law enforcement agencies.

With respect to SID deployment there are several critical issues:

- All of these sworn personnel are assigned to work Monday through Friday during normal business hours. This does not align very well with the nature of this activity, and thus detectives are often called out on overtime to assist FSB. Unit commanders could not provide any rationale for this approach to scheduling.
- There is significant uncertainty in the agency about the jurisdiction of the Gang Unit. Policy indicates, “The Gang Unit is responsible for investigating all crimes involving individuals who are documented gang members....” Some members of the agency reported that the threshold for notifying the Gang Unit was actually

¹¹ Moving the work of criminal Investigators towards crime control. Anthony A. Braga, Edward A. Flynn, George L. Kelling and Christine M. Cole. National Institute of Justice, 2011.

that the offense or offender had to be related to gang activity.

- The SID utilizes an information system to collect intelligence data on gang members. There appears to be very limited analysis of this data, particularly link analysis.¹² Ironically, staff assigned to the department's Crime Analysis Unit does not have access to the gang data.
- The agency has made a strong commitment to participating in federal task forces. While laudable, this strategy should be evaluated in the context of critical staffing shortages.

Criminal Investigations Division (CID)

CID consists of four units:

- Family Advocacy Center
- Violent Crimes
- Crisis Intervention Team
- Juvenile

The largest part of the division is Violent Crimes. Its staffing is:

- 3 lieutenants
- Homicide (1 sergeant, 7 detectives)
- CACU (1 sergeant, 8 detectives)
- Robbery (1 sergeant, 6 detectives)
- SORD (1 detective)
- Cold Case (1 sergeant, 6 detectives)
- FASTT (1 sergeant, 2 detectives)
- CED (1 sergeant, 2 detectives)
- Sex Crimes (1 sergeant, 4 detectives)
- CIU (1 sergeant, 6 detectives)

All of these members work normal business hours with weekends off.¹³ As we can observe there is a high degree of specialization within the Violent Crimes Unit. With 9 sergeants and 42 detectives the nominal span of control is 1:4.6.

The Homicide unit responded to 25 homicides in 2014. Interestingly, their jurisdiction is limited. That is, the Gang Unit investigates homicides involving gang members, and

¹² The Corner and the Crew: The Influence of Geography and Social Networks on Gang Violence. Andrew V. Papachristos, David M. Hureau, Anthony A. Braga. American Sociological Review June 2013 vol. 78 no. 3 417-447.

¹³ CACU works a 4/10 plan schedule with days off on Friday, Saturday and Sunday, or Saturday, Sunday, Monday.

homicides involving children are assigned to Crimes Against Children Unit. Homicide also responded to in custody deaths and officer involved shootings, but it is our understanding that the Force Investigation Team will handle these incidents in the future.

The Armed Robbery Unit conducts follow-up investigations on assigned cases and will respond to call-outs for robberies that meet APD criteria (generally when the suspect is in custody) and may be asked to respond to other violent crime call-outs.

The FASTT unit describes its core functions as dealing primarily as a liaison and advocate for victims of domestic violence and to investigate “high-lethality” cases.

The Missing Persons Unit appears to do much of its work by telephone and computer. They ensure that the information provided by the investigating officer is correct and they use financial records and mobile phone activity to help locate subjects. It is not clear from department reports whether these strategies are successful.

Cold Case Units and the Task Forces are difficult to assess, however a recent study by RAND concluded:

- “Clearing a cold case does not automatically lead to making an arrest. A substantial portion of successful investigations in all sites (from one in three to one in two) did not result in an arrest for a variety of reasons, including the inability to locate witnesses, uncooperative witnesses, a suspect being deceased or incarcerated, or DNA results that implicated multiple individuals or were otherwise inconclusive.
- In sexual-assault cold cases, even when a suspect DNA match has been made, about one- third of cases are not filed because of problems with victim cooperation, credibility, or availability of suspects who are deceased or in prison. However, those cases that are prosecuted resulted in convictions and lengthy prison terms more than 90 percent of the time.
- Cooperation between police and prosecutors can improve both the efficiency and effectiveness of cold-case investigations. Typically, a prosecutor is not brought into the picture until a cold-case investigation has produced results. But, when police consult with prosecutors beginning at case screening, as they do in Denver, prosecutors can offer advice on whether the case is likely to produce a conviction if cleared and on what kinds of evidence will be most compelling in court.”¹⁴

The Crisis Intervention Unit staffing is defined, in part, by the Settlement Agreement.

Paragraph 123 of the agreement states that “APD shall maintain a **sufficient number of**

¹⁴ Cold-Case Investigations: An Analysis of Current Practices and Factors Associated with Successful Outcomes. Robert C. Davis, Carl Jensen, Karin E. Kitchens. RAND, 2011.

crisis intervention certified responders who are specially trained officers across the Department who retain their normal duties and responsibilities and also respond to calls involving those in mental health crisis. APD shall also maintain a Crisis Intervention Unit (“CIU”) composed of specially trained detectives housed at the Family Advocacy Center whose primary responsibilities are to respond to mental health crisis calls and maintain contact with mentally ill individuals who have posed a danger to themselves or others in the past or are likely to do so in the future. **APD agrees to expand both the number of crisis intervention certified responders and CIU.”**

Paragraph 124 indicates that, “The number of crisis intervention certified responders will be driven by the demand for crisis intervention services, with an initial goal of 40% of Field Services officers who volunteer to take on specialized crisis intervention duties in the field. **Within one year of the Effective Date, APD shall reassess the number of crisis intervention certified responders, following the staffing assessment and resource study required by Paragraph 204 of this Agreement.**

Paragraph 135 mandates that, “Within three months of completing the staffing assessment and resource study required by Paragraph 204 of this Agreement, APD shall develop a recruitment, selection, and training plan to assign, within 24 months of the study, 12 full-time detectives to the CIU, **or the target number of detectives identified by the study, whichever is less.”**

The department is in the process of providing crisis intervention training for all officers in the Field Services Bureau, and is expected to reach that goal in December 2015. We concur with the recommended staffing level of 12 full time detectives for CIU.

Property Crimes Division

The property crimes division consists of two sections, each directed by a lieutenant. The Property Crime Section includes:

- Auto Theft (1 sergeant, 5 detectives)
- Burglary (1 sergeant, 5 detectives)
- Night Investigation Teams (1 sergeant, 4 detectives)

The Economic Crime Section includes:

- Criminal Nuisance Abatement (1 sergeant, 2 detectives)
- Organized Crime (1 sergeant, 3 detectives)
- White Collar Crime (1 sergeant, 3 detectives)
- Pawn Shop Detail (1 sergeant, 3 detectives)
- Crime Stoppers (1 sergeant, 1 detective).

With the exception of the NITE teams that focus on bait car operations, all of these detectives work during the day and have weekends off.

Special Services Bureau

The Special Services Bureau (SSB) is directed by a deputy chief, and contains four divisions:

- Special Operations
- Metro Traffic
- Open Space
- APD Academy

The Special Operations Division (SOD) is directed by a commander and a lieutenant, and includes the following units:

- SWAT (2 sergeants, 11 officers)
- K-9 (1 sergeant, 7 officers)
- Bomb Squad (1 sergeant, 3 full-time officers, 3 part-time officers)

APD maintains a full-time SWAT team. The team works a 4/10 schedule with hours from 1000 to 2000. The team is off Saturday, Sunday and Monday. Of the four days that the team is working one day is used for training, one day is allocated to assist with staffing in the area commands and the other two days are used for a variety of activities.

The following table illustrates SWAT team callouts through September for the past two years.

	2014	2015
January	5	4
February	3	7
March	9	2
April	3	2
May	4	7
June	4	5
July	5	8
August	5	0
September	1	1
	39	36

Table 12 APD SWAT Activations Year to Year Comparison

One of the issues that agencies face is whether a SWAT team should be full or part time. Each approach has merit. It can be argued that a full-time team will be more cohesive, and will attain more experience. However, most full-time teams do not operate 24/7 and as a result, critical time may be lost in activation. The APD team only works 40 hours a week, thus it is more likely than not that an incident will occur requiring their services while they are off duty. Another disadvantage of a full time team is that they might be

used on an incident *because* they are available. That is, they might be assigned to an incident because they are working-an incident that may have been resolved in another way if the team was not readily available

By contrast, part time SWAT teams must work harder to ensure that members are properly trained and have enough exposure to the range of incidents they are likely to encounter. However, because officers are on duty 24/7 they are much more likely to be available to respond to an active shooter incident.

A recent survey conducted by the US Bureau of Justice Statistics revealed that of the 95 participating agencies with 100 or more sworn officers, 30% maintained a full-time SWAT Team.¹⁵ The Louisville METRO Police Department (1200 sworn officers) recently conducted a review of its part-time SWAT team, and decided to maintain that structure.

The Tucson Police (940 sworn) SWAT team is operationally deployed on average 200 times every year; and those calls for assistance include calls with other local, state, and federal law enforcement agencies. The team consists of one lieutenant, four sergeants, and 40 officers. Three of the officers and one sergeant are full time and they make up the SWAT team. This squad is responsible for vehicles, equipment, weapons maintenance, setting up training, and various other assignments. The rest of the team members all have other full time jobs within the police department.¹⁶

The Indianapolis Metro Police Department (1700 sworn) recently shifted from a part-time team to a full-time team with a very focused mission. In an interview with the Indianapolis Star the chief indicated, "They're targeting those violent offenders in those areas where we have violent crime," he said. In the past, the city's SWAT team operated on a callout basis, suiting up specifically to deal with dangerous situations such as crowd violence or armed suspects barricaded inside buildings. The full-time SWAT team, with about a dozen members, has a different mission: to seek out and neutralize violent offenders.

That objective, said Lt. Chris Bailey, means the heavily armed SWAT officers are often "working with district personnel to identify hot areas and -conduct covert investigations. The anti-crime plan, fully operational since last month, has the blessing of top city officials, from Mayor Greg Ballard to Public Safety Director Troy Riggs. It has other components, as well: community meetings in neighborhoods within 72 hours after a shooting; close monitoring of people with a history of violence; careful tracking of robbery felons recently released from prison. The permanent members are getting a hand from about 35 part-

¹⁵ Source: Bureau of Justice Statistics, Law Enforcement Management and Administrative Statistics (LEMAS) Survey, 2013.

¹⁶ <http://www.tucsonaz.gov/police/swat>

time SWAT team members, Bailey said".¹⁷

Canine Unit

The APD Canine unit is staffed from 1800 hours until 0400 hours. It is estimated that the police service dogs are deployed 7 to 10 times per week. Canine officers also receive tactical training, and three of the dogs are trained to detect explosives.

In some cities canine units are assigned to a patrol sector. For example, the Minneapolis Police (MPD) Canine Unit currently has 17 canine teams working in the city. The 17 teams attend roll call at the police kennel and are assigned shift duties from that location. Canine teams are on duty almost 24 hours a day and can also be called in at any hour. Canine teams patrol all parts of the city.

MPD Canine teams work regular uniform patrol in their assigned precinct and respond to assist on alarm calls; burglary calls; building searches; article searches; suspect tracking; area and building searches for suspects; narcotics and bomb calls; and officer safety assists. Canine officers may also assist on other police calls but they try to stay available for calls where their dog might be deployed.

The Austin Police K9 Unit's main responsibility is to support the Patrol Division. When on duty, Patrol K9 teams remain on patrol until they are called to assist patrol officers. Typically the K9 teams are used to locate suspects who have fled the scene of a crime, but on occasion are requested to search for missing individuals and evidence. Two of the K9 teams are also SWAT-certified and deploy for all SWAT related incidents.

The final component of SOD is the Bomb Squad. It consists of full and part-time personnel. The full-time staff is assigned to the day shift. Like the other SOD activities, ordinance work requires extensive training and certifications. There are a number of ways to staff and deploy for EOD calls. For example, in many cities such as Dallas, Ft. Worth, San Diego, Orlando, and Cincinnati, bomb disposal is a function provided by the fire department, sometimes in collaboration with the police.

Metro Traffic

A commander directs the Metro Traffic Division. Their principle activities are traffic enforcement, accident investigation, DWI enforcement and hit and run follow-up investigation. There are two sections each headed by a lieutenant: the Traffic Section and the DWI Section.

The Traffic Section consists of 2 sergeants and 11 officers, all of whom use motorcycles

¹⁷ <http://www.thecrimereport.org/news/crime-and-justice-news/2014-07-indy-swat-team>

for traffic duties. The unit works from Monday through Friday 0700 to 1500. During other hours officers are on call for fatal traffic crashes. Their key duties are to investigate traffic crashes and to enforce traffic laws.

The following figure illustrates the distribution of traffic accident calls in the city. As we see the peak demand time for traffic accident investigation is in late afternoon.

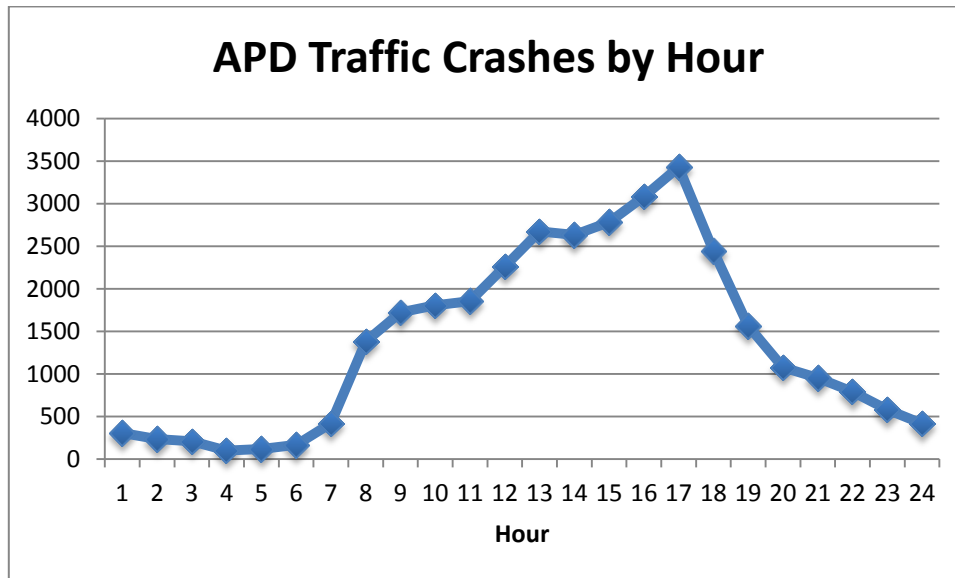


Figure 20 APD Crashes by Hour of Day.

The DWI program is based on a model that is designed to encourage officers in the field to make DWI arrests. The notion is that if field officers believe that someone else will relieve them of the burden of processing DWI offenders they will pursue these cases. The DWI Unit consists of one sergeant and 10 officers. They are assigned from 1800 Hours until 0400 Hours (4/10 plan) with Sunday, Monday and Tuesday off. The section often uses grant funds to provide coverage on the other nights.

During 2014 the DWI Unit made 2302 DWI arrests, or an average of 225 per officer. Based on an officer working 1680 hours per year it equates to a DWI arrest about every 7.5 hours.

Open Space Division

When the Albuquerque Open Space Division was created there were three sections: Operations and Maintenance, Law Enforcement and Visitor Services. The Operations and Maintenance Section was charged with the responsibility of overseeing all park maintenance needs, including fencing, trail work, and building upkeep.

The Law Enforcement Section was added to the Division in 1986. Open Space law enforcement officers were fully commissioned police officers that ensured the protection of the natural and archaeological resources within Open Space Division managed lands. This section had 15 positions, including one chief and three sergeants. After 2000 Open Space officers were absorbed into APD.

Today a commander directs the Open Space Unit as well as several support units including:

- Prisoner Transport
- Metro Court Protection
- Office of Emergency Management
- Homeland Security
- Horse Mounted Unit

Of particular interest is the Open Space Unit that consists of one lieutenant, 2 sergeants, and 8 officers. The day shift consists of 1 sergeant and 4 officers. Two officers are off Friday and Saturday and the other two are off on Sunday and Monday. The staffing is the same on the night shift. It is hard to understand why officers with these types of assignments would be scheduled to be off on the weekends.

The other critical issue is that given the relative low staffing and the fact that Open Space facilities are all over the city, it seems unlikely that these officers could handle much of what takes place in the Open Space. That is, most of the calls are being assigned to area command officers.

It seems that the principle contribution of the open space officers is their unique skills in search and rescue. While laudable, it would seem that these tasks could be performed in cooperation with the many search and rescue groups in the area and the Albuquerque Fire Department. Alternatively, the APD could take the lead in organizing volunteers to perform this important work.

APD Academy

As a result of the Settlement Agreement, (SA) the department must deliver significantly more training to personnel. These requirements cannot be met with the current Academy staffing levels. Using officers from the Field Services Bureau to supplement the Academy staff would place a significant burden on the already understaffed Field Services Bureau.

The department can avoid that burden by hiring part-time contracted employees who have law enforcement experience as well as teaching certifications for law enforcement. The contracted employees could be used on an as needed basis in order to meet the requirements of the Settlement Agreement. Among the possible types of training the contracted employees could assist with include (SA paragraphs referenced):

- | | |
|---|----------------------|
| • Paragraph 33 – Annual ECW Recertification | 2 Hours |
| • Paragraph 86 – Use of Force | 40 Hours |
| • Paragraph 86 – Use of Force Refresher | 24 Hours |
| • Paragraph 88 – Supervisor Use of Force | 24 Hours |
| • Paragraph 89 – Firearms Training | 8 Hours |
| • Paragraph 150 – Training on New Policies | Yet to be determined |
| • Paragraph 158 – FTO School | 40 Hours |
| • Paragraph 199 – Misconduct Investigation | 24 Hours |
| • Paragraph 199 – Misconduct Inv. Refresher | 8 Hours |
| • Paragraph 209 – New Sergeant Training | 40 Hours |
| • Paragraph 211 – Supervisor Management | 32 Hours |

The courses listed above are in addition to the other ongoing training conducted by Academy staff.

We recommended the Albuquerque Police Department supplement its current Academy staff with up to twenty (20) additional part-time contracted staff, and that this level be closely monitored to ensure that it is appropriate.

Professional Accountability Bureau

An Assistant Chief heads the Professional Accountability Bureau (PAB). The Professional Accountability Bureau is comprised of the East and West Field Services Bureaus, the Communications Division, Internal Affairs, Operations Review and the Department's Public Information Officer.

Of particular concern to this study is the staffing for the new Internal Affairs Division (IAD). The Division will have two components: Critical Incident Review Team and Internal Affairs.¹⁸This division will play a key role in APD's efforts to gain compliance with the USDOJ agreement.

The Settlement Agreement states that:

"The City shall ensure that APD and the Civilian Police Oversight Agency have a sufficient number of well-trained staff assigned and available to complete and review thorough and timely misconduct investigations in accordance with the requirements of this Agreement. The City shall re-assess the staffing of the Internal Affairs Bureau after the completion of the staffing study to be conducted pursuant to Paragraph 204. The City further shall ensure sufficient resources and equipment to conduct thorough and timely investigations."

¹⁸ The Force Investigation Team will report directly to the Assistant Chief

As part of the staffing study we interviewed the commander of the division and examined the proposed procedures and staffing for the division. The proposed organization is illustrated below:

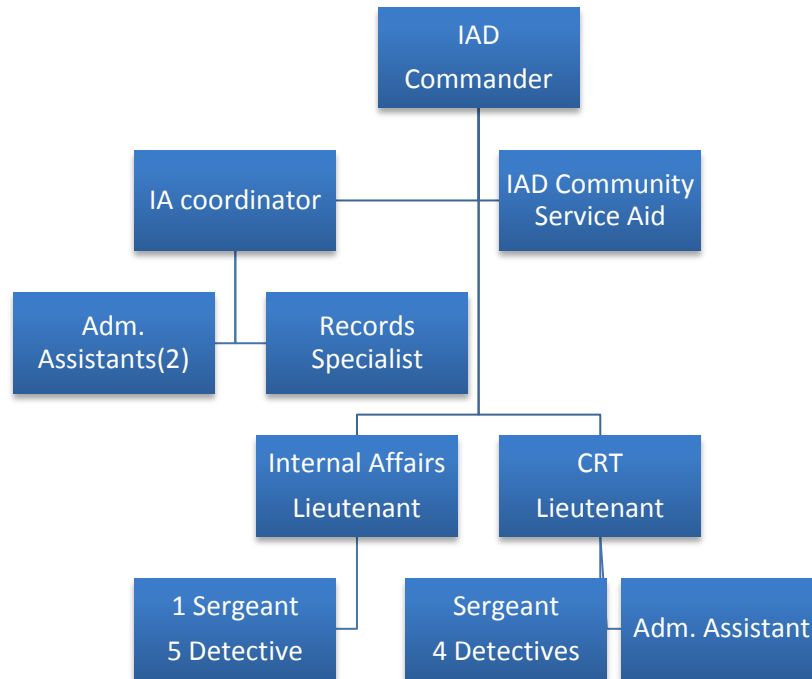


Figure 21 Proposed Staffing for IAD

We concur with this proposed staffing plan with one important caveat. The Settlement Agreement has identified a number of tasks to be performed to increase accountability and transparency of Internal Affairs. It is difficult to forecast the labor demands of these activities. Therefore we recommend that **APD conduct regular semi-annual analyses to ensure the staffing levels in the division are appropriate.**

The other major unit in PAB is the Communications Center. The center is staffed by:

- 74 911 Operators
- 12 NCIC operators
- 42 Dispatchers
- 10 Supervisors

The center answers 911 calls for police and fire but only dispatches for police.

The current daily staffing of the center is as follows:

Hours	Supervisors	NCIC Operators	911 Operators	Dispatchers
0700-1500	1 or 2	2	13	8
1500-2300	1 or 2	2	14	8
2300-0300	1	2	13	8
0300-0700	1	1	10	8

Table 13 Communication Center Daily Staffing

There are a number of issues that affect the communications unit performance.

First, comparable sized PSAP organizations have middle management to act as Assistant Manager, Lead Supervisors and Quality Control Supervisor to ensure policy and procedure is followed and training is ongoing. In this center, the operational management staff is a staff is very limited (one FTE). The administrative management staff does provide on call back up for absences, however, operations questions still are referred to the center manager. The center supervisors are often unable to assume managerial responsibilities due to the nature of the work they do to manage the increasing volume of 9-1-1 calls coming into the center, the calls for service and the level of dispatch oversight that is required. This also reduces their ability to offer additional training and development.

Second, there is an organization and structural barrier between the communication Center and the Albuquerque Fire Department (fire dispatch is physically separated from the rest of the center). Since the key job of the center is to facilitate the delivery of all public safety service, this disconnect can be problematic. The evidence of this structural issue can be seen in the city's response to "man down" calls for service. Whenever the 9-1-1 Center receives a call about a medical call, the fire department insists that the police respond to the scene first to ensure security. While this might be a sound strategy for calls that are clearly violent (e.g. shootings) it makes far less sense for cases where individuals are passed out on a sidewalk.

A recent article in *Fire Engineering* summed up this dilemma:

"These violent activities to which firefighters respond can include shootings, stabbings, domestic disputes, gang activities, or assaults. In far too many cases when these calls for assistance are received, the police may or may not be on the scene and may be unaware of the nature of the call to which firefighters/EMS are responding. It is clear that these incidents are, for the most part, a law enforcement incident. However, equally important is the need for immediate emergency medical aid. The responding companies need to

take steps to ensure their safety while at the same time providing the emergency medical aid that is required. ¹⁹

In our view the key to providing police and fire response to these types of incidents is coordination and this can best be done through a unified communication system; that is through non-sworn cross-trained dispatchers for police, fire and EMS. All personnel in the Communications Center should report to the Director of the center.

Third, as we can observe in Table 13 there is little variation in staffing by hour of day. As APD adopts a more workload driven staffing model for patrol it will become necessary to make adjustments in communication center staffing. For example, the numbers of police officers on duty during peak demand times may be double that of off-peak times. It will be important for the communication center to monitor this closely. If they retain their current configuration they are likely to be understaffed at times and overstaffed at others. Like patrol, we believe that the center would benefit if there were one work schedule for all employees.

Finally, we believe that the TRU should be organizationally housed in the Communication Center. This will provide more integrated and consistent public service.

Administrative Support Bureau

The Administrative Support Bureau was formed in late 2014 and consists of the Planning Division, Fiscal Division, Records Division, Personnel and Payroll Division, and Inspections/Audit.

Most of these units are relatively small and appropriately staffed. The largest unit is the Records Division. While it is beyond the scope of this study, it appears that the Records Unit is hampered by some legacy policy and procedures that result in less than desirable results. For example, a significant amount of staff time is devoted to reviewing and correcting police reports (the unit supervisor indicates that 100% of reports have missing data). Some of these corrections are a result of the lack of correspondence between the software that officers use to prepare reports, and the software used to submit UCR and NIBRS reports. We were also told that when officers investigate a crime and stolen property needs to be entered in NCIC, the officer must *telephone* the Records Unit and provide a list of the property and the serial numbers. The officer must enter that same information into the case report. It seems as though this process is both time-consuming and the likelihood of an error in transmittal seems much greater on the phone than electronically.

¹⁹ <http://www.fireengineering.com/articles/2015/05/fire-and-ems-responses-to-violent-incidents-tactical-considerations.html>

Conclusion and Recommendations

In a recent study conducted by the Police Executive Research Forum police respondents were asked to describe the effects of the economic downturn on their agency's staffing²⁰.

The actions taken included:

- Cut overtime spending: 66%
- Eliminated or reduced police employee salary increases: 58%
- Imposed a hiring freeze for sworn positions: 43%
- Imposed a hiring freeze for civilian positions: 43%
- Reduced staffing levels through attrition: 36%
- Laid off employees: 22%
- Implemented unpaid furloughs: 16%.

Indeed, the recent past has been extraordinarily challenging for communities as they struggled to provide high quality public safety services under unusual fiscal constraints. However, one of the byproducts of that effort has been a heightened awareness of how important it is to critically examine the deployment of police personnel. In many cases police executives have had to ask tough questions. Whereas in the past those inquiries focused largely on what the agency does and how does it do it; more recently that focus has shifted to why the agency does things and who should do it?

The Albuquerque Police Department is in a period of significant change. A heightened level of scrutiny, coupled with challenges in recruitment and retention has prompted the organization to make significant organizational changes. Many of these actions will help to rectify previously problematic staffing issues. Our perspective is that there are two components to the police-staffing question. The first, of course, is whether there are enough officers to meet performance standards. The second question is whether an agency is using its staff in the most effective and efficient manner. Before offering our recommendations we will summarize some of the key findings and observations of our study.

APD is a highly compartmentalized, and fragmented organization. At a high level APD appears to be a decentralized police organization with a strong orientation towards neighborhood based policing. There are, for example, area commands and majors that have responsibility for a geographic region. This image, however, is not very accurate. Most of the decentralization is, in fact, in the Field Services Bureau. By contrast, most of the units that are designed ostensibly to support patrol in the other bureaus, are strategically and operationally disconnected from field service delivery. One only need look at the work schedules for these units to see how disconnected they are. Senior level managers we interviewed had difficulty in demonstrating how the Investigative Bureau

²⁰ <http://policeforum.org/library/critical-issues-in-policing-series/Econdownturnaffectpolicing12.10.pdf>

and the Special Services Bureau integrated with the Field Services Bureau, or integrated within each Bureau to advance a cohesive and comprehensive crime fighting strategy or plan.

APD Area Commanders are accountable to their communities, but lack the authority and resources to accomplish their mission. In recent years policing has placed great emphasis on accountability-not just for officer misconduct, but for the control of crime and disorder. APD has charged the area commanders with the task of working with their communities to establish confidence in the department's ability to make their neighborhoods safe. Unfortunately, even though the area commanders must face tough questions about APD performance from those communities, they have relatively little control over the resources they need to address these issues. What can they say, for example, about their ability to address burglary, when all the decisions about the department's response to burglary are made elsewhere. In our interviews, managers would often refer to headquarters-type units as being "inside," and those in the FSB as "outside". Clearly, this suggests that those assigned to patrol have a lower status. This must change for the organization to be more effective.

APD has very limited flexibility in how it deploys sworn personnel. Like most departments that operate under a collective bargaining agreement, APD has constraints in the way in which officers are deployed. However, in our view, these constraints are unusually challenging in APD. First, it appears that once an officer in patrol has selected a shift and day-off group, the officer *may* be involuntarily reassigned, but we were told that it rarely happens. Many managers, in fact, said it could not be done. Similarly, everyone we spoke to told us that a person assigned to a special unit could not be reassigned to field services unless a unit was disbanded. Many managers also argued that an officer could not be transferred within a bureau, for example from robbery to burglary. Ironically all of these officers hold the same rank and thus the agency should not have the kinds of problems that occur when "detectives" hold a different rank. We often heard managers talk about the "property rights" of an officer assigned to a specialized unit.

Concerns about staffing have caused managers to adopt very conservative deployment strategies. Senior level managers routinely and repeatedly spoke of "under-staffing or manning issues." These statements were heartfelt; however, beyond the simple analysis that X number of years ago there was Y number of officers, no senior level managers articulated any analysis that demonstrated an understanding of the optimal staffing levels in the past or today. Senior level managers simply concluded that the number of personnel in place now was below the staffing level in the past – therefore, the unit under discussion was understaffed. Some unit managers have significantly restricted how and when these units are used (e.g., SWAT, Traffic, Open Space) and that raises the question as to whether or not those units should be staffed at all. Some units such as the SWAT team, as one example, could become regionalized in a cooperative agreement with neighboring cities, county or State Police.

APD has made significant progress in optimizing the use of nonsworn personnel. This is particularly evident in the criminalistics area where nonsworn field investigators have replaced sworn evidence technicians. APD has, for a number of years, used nonsworn staff to investigate minor traffic crashes. We recommend that this be expanded.

Recommendation One. The APD should adopt a “flatter” organizational structure that will facilitate communication and accountability.

As APD introduces an organizational strategy that places greater emphasis on the area commands it will become necessary to refine and balance the responsibilities of the senior leadership group. In order to accomplish this we are recommending an alternative organizational structure. In this model the department eliminates the position of deputy chief, and the five bureau majors and executive director report directly to the Assistant Chief of Police.²¹



Figure 22 Proposed Leadership Structure

Recommendation Two. The APD should adopt the verified response model for burglar alarms.

APD uses a traditional method to control false alarms. That is, after a certain number of false alarm calls, the resident or business is fined. Unfortunately, evidence suggests that this approach is of limited value. There are many communities that have adopted verified

²¹ The special operations bureau has been renamed Operations Support and contains the Special Operations, Metro Traffic and Open Space Divisions.

response with good results. There will likely be some resistance to this approach, particularly from the alarm industry, but the results speak for themselves.

Recommendation Three. APD should adopt a more strategic approach to criminal investigation.

For many years researchers have sought to better understand the criminal investigation function and its relationship with other police personnel.²² Police administrators have found it difficult to make substantial changes in how investigations are conducted and how they are organized. In fact, a recent study done by researchers at Michigan State University concluded that, “the criminal investigation process has remained relatively unchanged in the face of the many paradigm shifts in the profession of policing over the past 30 years.”²³

Of particular concern in Albuquerque is the lack of a systematic approach to case assignment. Many organizations combine solvability factors with crime seriousness to craft a score for each crime. For example, case review might include the following:

- Can the identity of the suspect/s be established through:
 - Useable fingerprints being discovered
 - Significant physical evidence being located –Victims/witness/informant information
 - A license number of or a significant description of the vehicle used in the offense
- Is there serious physical harm or threat of serious physical harm to the victim?
- Did the suspect(s) utilize a deadly weapon?
- Is there a significant m.o. that will aid in the solution of the offense?
- Is it a sex offense in which the victim and suspect(s) had physical contact?
- Can a suspect be named?
- Can a suspect be identified?
- Can a suspect be described?

We recommend that all investigation of property crime be assigned to the area commands. Moreover, we recommend that investigator work schedules should more closely reflect the temporal nature of police work.

²² For example see: John Eck. (1983) Solving Crime: A study of burglary and robbery. Police Executive Research Forum.

²³ Frank Horvath; Robert T. Meesig; Yung Hyeock Lee (2001) National Survey of Police Policies and Practices Regarding the Criminal Investigations Process: Twenty-Five Years After Rand

Recommendation Four. The APD Special Operations Division should be repurposed to provide better and coordinated support to the area commands. A case can be made for a part time SWAT team in Albuquerque, particularly given the relatively low frequency of activations. However, because of its size APD must often take the lead responsibility for these functions in the region, and thus a full time team may be warranted.

If the agency opts to maintain a fulltime team we would recommend a different strategic approach. First, because a relatively small fraction of their on-duty time will be devoted to activations it is important that their unobligated time be well managed. They may be able to assist during peak calls for service demand times, or to work with area commands on tactical plans. These officers could be an important part of the agency's problem-solving efforts, particularly when the agency is seeking to increase police visibility.

Recommendation Five. APD should add resources to Metro Traffic while ensuring that these resources are effectively deployed. One of the most significant challenges for an urban police department is how to effectively and efficiently manage resources in order to ensure traffic safety. This is particularly true in communities in which there is widespread concern about crime and disorder.

There are a number of factors that may impede a city's ability to provide an effective police traffic management program. Among these are:

- There is a generally held belief that traffic crashes are "accidents" and are not preventable,
- Police traffic enforcement, the principal tool in the department's crash prevention program, is rarely applied, and when it is applied, it may not be done at the places where traffic crashes are occurring,
- Most citizens care a great deal about traffic safety, but they do not see the nexus between traffic law enforcement and crash prevention. Many citizens view traffic law enforcement principally as a tool for generating revenue.

There are several reasons that a police department must devote resources to traffic safety:

- Traffic violations are significant contributing factor in traffic crashes,
- Traffic violations, particularly speeding and red-light running, pose significant threats to the quality of life in neighborhoods,
- Traffic stops are an important opportunity for police-citizen interaction, and
- Traffic law enforcement has shown to have significant deterrent effects on non-traffic crime.

One of the most challenging aspects of providing police traffic services is the best way to handle citizen traffic complaints. Almost every department receives numerous complaints from citizens about speeding cars or reckless drivers in their neighborhood. The typical response to these complaints is to "increase patrol" in the area or in some cases an

agency may assign an officer to monitor the location for violators. Very often the officer spends an hour or two at the location, and reports back that there was very little traffic, and even fewer violators. Many police officials view this activity as unproductive.

In spite of this apparent inefficiency, we suggest that citizen generated traffic complaints are critical for several reasons. First, the nature of these offenses is not amenable to citizen response. That is, unlike some types of crime in which citizens can take preventive action (alarms, lights, and target hardening) there are few actions that citizens can do to control traffic in their neighborhood. Second, whether or not there really is a speeding problem is arguably irrelevant. The fact that citizens perceive a threat (particularly to their children) makes the threat very real in their mind. Finally, these situations provide great opportunities for officers to interact with citizens in problem solving. To the extent that they are successful in handling these problems, it could result in benefits in other areas.

Another benefit of traffic law enforcement is the opportunity that it provides for police-citizen interaction. According to a recent study conducted by the Bureau of Justice Statistics, each year about 19% of the adult population in the United States has a face-face contact with a police officer. *About one half of those contacts are during traffic stops.* The implications of this are important. For many citizens the only contact they have with an officer is during a traffic stop. Thus, these encounters provide a unique opportunity to influence how citizens view their police department and its members.²⁴

Finally, we know from years of empirical research that under certain circumstances traffic enforcement can be an effective deterrent to crime²⁵.

We recommend adding additional resources to Metro Traffic but under a different model:

- The main function of the Traffic Unit should be to investigate serious and fatal accidents and to conduct traffic enforcement at high accident locations. They should no longer handle property damage only accidents. APD should examine alternative ways to handle minor accidents including citizen self-reports and the enhanced use of non-sworn accident investigators.
- The Traffic Unit should provide coverage seven days a week, at least 20 hours per day.
- Officers must maintain acceptable levels of productivity in order to remain in the unit.

²⁴ Contacts between Police and the Public Series, Bureau of Justice Statistics

²⁵ Weiss, Alexander. DDACTS: An Historical Overview. National Highway Traffic Safety Administration. July 2013.

- Even though APD staffs a centralized Traffic Unit it is critical that the agency adopts the following strategy:
 - Accident prevention must be a core value, and every member of the department must understand that it is a critical part of the mission,
 - The program must emphasize that accident prevention is an agency-wide responsibility, not just the responsibility of the Traffic Unit,
 - Area commanders should be accountable for accident prevention
 - The department should provide the necessary training, equipment and staffing to support the program

Recommendation Six. APD should adopt a career development program that includes a strong emphasis on the importance of patrol and mandates periodic transfers from specialized assignments back to patrol.

There are a number of factors that influence the careers of law enforcement officers. First, the nature of the enterprise requires that most officers will be assigned to uniformed service delivery; with the resulting requirement for shift work. Second, as officers age their capacity to perform the duties of patrol may be diminished. Third, in most agencies police officers reach top pay in four to five years. Finally, a relatively small percentage of officers are likely to be promoted in their careers.

In the face of these constraints many officers seek specialized assignments. Depending on the agency there can be many different opportunities including, traffic, investigations, community affairs, SWAT, etc. These assignments often offer significant benefits including better hours and working conditions, additional pay, advanced training, and the opportunity to become highly skilled in a discipline that might have application outside of policing.

APD has a number of specialized units and positions and as a general rule members can stay in those assignments indefinitely. This is true not only for police officers but for supervisors and commanders as well.

Unfortunately, the methods that are used in many law enforcement agencies to staff these units are problematic for a number of reasons:

- The factors that influence whether a person receives an assignment may not be merit based, or at least not perceived to be²⁶
- In many organizations officers can remain in specialized assignments indefinitely, thus limiting opportunities for others
- Specialized units often define the nature of their responsibilities; at times they are not consistent with the agency mission

²⁶ Each specialized position in Lansing Michigan PD has a set of formal job requirements but in practice the posts are assigned largely on the basis of seniority.

- Specialized unit commanders often think that they have the best possible individuals in their units, often ignoring the fact that there may be others more qualified that have not been afforded access
- Managers in specialized units have limited exposure to the requirements of managing other units.

It is not uncommon to hear police executives proclaim, “Patrol is the backbone of the department. “ While this sounds good we find that in many departments there is a disconnect between their rhetoric and reality. For example, it is not uncommon to find departments in which vacancies in special units are filled as soon as they occur, even though it means that the patrol unit will be short-staffed. Moreover, in some departments once an officer leaves patrol there is a relatively high probability that they will not return.

The best strategy to address this issue is to implement systematic job rotation for officers and supervisors assigned to special units back to patrol.

Job rotation has been common in police organizations since the 1980’s. Nonetheless, it still has many critics. To some, it is inefficient to remove highly trained and experienced officers and return them to patrol. To others, special assignments are a reward for years of service in patrol, and serve a useful function in the organization. Finally, critics of job rotation argue that there are some officers that cannot be in patrol because of physical or other limitations, and special units provide a place for them.

These critiques, of course, aren’t consistent with good organizational development. When an officer with experience and training returns to patrol, those skills aren’t lost-rather they bring those skills with them. This improves their performance and ostensibly the performance of their squad. Secondly, police officers that are not able to perform the functions of their job should be released.

Recommendation Seven. APD should adopt a more strategic approach to crime control that focuses on the area command.

As we have pointed out elsewhere in this report APD is a highly centralized organization. A substantial fraction of resources are devoted to specialized units that have, in some cases, become isolated from the core mission. We believe that it is fundamental to good policing that the agency should focus its resources at the neighborhood level. To that end we are suggesting a new model for area command organization. It is illustrated below.

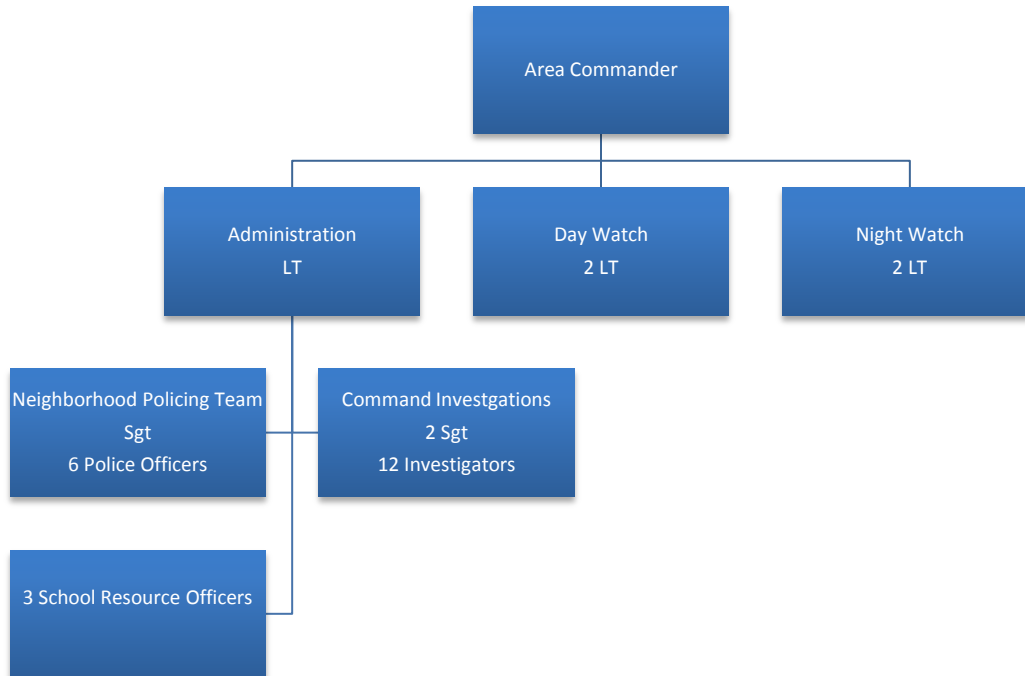


Figure 23 Area Command Organizational Structure

This model introduces a number of changes in the way in which the area command operates. **Under this new model 75% of APD sworn staff are assigned to area commands.**

- Patrol is organized under a 12-hour work schedule. On each watch there are two day off groups (“A” and “B”). A lieutenant heads each group. In this approach there is nominally a lieutenant on duty seven days a week, 24 hours a day.²⁷ On many days there will six lieutenants on duty round the clock in Albuquerque.
- Officers are assigned to a watch and a day off group. Sergeants will be assigned based on a span of control of 6 or 7, but in no case greater than eight. For example, if 28 officers were assigned to the day watch, “A” team, we would assign 4 sergeants. Each officer is assigned to a specific sergeant, but all of the sergeants and officers will work the same schedule, and thus be familiar with each other and each other’s work. This can be important when an officer is involved in a use of force incident and his or her sergeant is not on duty.
- Each area command will have an administrative lieutenant. In addition to assisting the area commander, the lieutenant will supervise area command support personnel, including area investigators, school resource officers, and the newly formed neighborhood policing team.
- Each area command will deploy 12 investigators²⁸, and two sergeants to direct them. They should staff day and evening shifts, but be flexible enough to

²⁷ Of course, there will some days when the lieutenant is off due to illness, training, etc.

²⁸ This is the initial level of staffing and should be periodically reviewed.

accommodate the needs of the command. The area commander will choose area command Investigators and sergeants.

- Area commands will deploy a neighborhood policing team (NPT) with six officers and a sergeant. Neighborhood policing is an approach that seeks to increase contact between the police and local communities. Neighborhood policing emphasizes a local approach to policing that is accessible to the public and responsive to the needs and priorities of neighborhoods. Its key elements can be summarized as:
 - The presence of visible, accessible and locally known figures in neighborhoods,
 - Community engagement in both identifying priorities and taking action to tackle them; and
 - The application of targeted policing and problem solving to tackle public concerns in neighborhoods.

Members of the NPT should be volunteers and be chosen by the Area Commander. Members should agree to serve in the post for a minimum of three years.

Appendix One: Sworn Officer Staffing by Unit of Assignment

	Chief	AC	Major	Comm.	LT	SGT	PO	Total
Office of Chief	1							1
PIO							1	1
PAB		1						1
FIT					1	1	4	6
IA				1	2	2	9	14
Ops Review					1		1	2
Field Services East			1					1
Foothills				1	5	11	91	108
South East				1	5	20	141	167
Northeast				1	5	19	124	149
Field Services West			1					1
Valley				1	5	16	105	127
Northwest				1	5	13	86	105
Southwest				1	5	11	81	98
Investigation			1					1
Mayor's Detail							3	3
SID				1	3	7	37	48
CID				1	3	8	42	60 ²⁹
SED				1				1
Operations Support			1					1
SOD				1	1	4	29	35
Metro Traffic				1	2	4	30	37
Open Space				1	1	2	14	18
Training			1		1	2	11	15
TOTAL	1	1	5	13	45	120	809	1000

²⁹ Includes six additional detectives for CIU