



*Leaders at the Core of Better Communities*

**Final Report**  
**Police Operations**  
**Novi, Michigan**

Submitted by:

ICMA Consulting Services

International City/County Management Association

777 North Capitol Street NE, Suite 500

Washington, DC 20002

202.962.3585

[agarnett@icma.org](mailto:agarnett@icma.org)

## **ICMA Background**

The International City/County Management Association (ICMA) is the premier local government leadership and management organization. Since 1914, ICMA's mission has been to create excellence in local governance by developing and advocating professional local government management worldwide. ICMA provides an information clearinghouse, technical assistance, training, and professional development to more than 9,000 city, town, and county experts and other individuals throughout the world.

## **ICMA Consulting Services**

The ICMA Consulting Services team helps communities solve critical problems by providing management consulting support to local governments. One of ICMA Consulting Services' areas of expertise is public safety services, which encompasses the following areas and beyond: organizational development, leadership and ethics, training, assessment of calls for service workload, staffing requirements analysis, designing standards and hiring guidelines for police and fire chief recruitment, police/fire consolidation, community-oriented policing, and city/county/regional mergers.

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## **Executive Summary**

The City of Novi Police Department (NPD) is well managed and has dedicated and well-trained personnel. The rank-and-file officers are professional, possess a wealth of experience, maintain unquestioned credentials and integrity, and have a commitment to want to help. The department provides a high level of specialized services to the citizens of and visitors to the city.

### *Administrative*

The department excels in areas such as crime scene investigations, human resources management, criminal investigations, and, in particular, citizen involvement. There has been a consistent effort to continuously improve the operations of the agency. These improvements have included leadership training for the command staff with the FBI in Quantico, Virginia.

This level of professionalism is further demonstrated in the appearance of the uniformed officers. It is clear the officers are expected to pay close attention to their appearance, and we note that this commitment to uniform presence is continued throughout the ranks, including the chief of police.

The NPD values involvement by the patrol officers in preliminary and secondary investigations. The department has in place the internal management procedures designed to increase accountability. This is clearly a department of which the city's residents and elected officials can be proud.

### *Communications Data Analysis*

The current Computer Aided Dispatch/Records Management System (CAD/RMS) has some limitations; specifically, it is incapable of capturing accurate downtime when officers are writing reports on their calls for service. This prevents police managers from monitoring agency activities accurately. It also prevents elected officials from having accurate reports on police related activities.

### *Patrol*

The ICMA team found that the overall staffing level within the Patrol Division is slightly higher than other departments that have been reviewed based on geographics, demographics and the classification of the communities. This conclusion is also supported by measuring the calls for service (CFS) versus the time spent (consumed) on each incident compared to unobligated/directed patrol, writing reports, and administrative responsibilities. The staffing level allows the officers to perform at a high level of service to the community. However, despite this staffing, response times appeared excessive during specific times of the day.

The patrol officers work 12-hour shifts, a schedule that provides for a higher level of staffing for each tour of duty. This schedule helps to reduce overtime and allows the department to deploy additional essential personnel to perform more efficiently and effectively.

## **I. Introduction**

This study of the operations and staffing of the Novi Police Department was authorized by the City of Novi, Michigan. Our work focused on the internal performance of the department and offers a detailed data analysis in Workload, Deployment, and Response Times. These three areas of analysis are almost exclusively related to patrol operations, which constitutes the majority of the department's personnel and financial commitment. However, in our operations review, the ICMA team reviewed all aspects of the police department.

Furthermore, we will address the issue of population growth and when the police department should be expanding its role in the community

In our study, we applied broadly accepted contemporary concepts and principles of organization and management. We recognize that there is no one right way to organize a police department and that every department must be structured to meet the specific needs of the community it serves. However, certain principles of organization have been proven valid over time:

- Tasks that are similar or related in purpose, processes, methods, or clientele should be grouped together in one unit under the control of one person.
- Each task should be clearly and concisely made the duty of an individual; responsibility for planning, execution, and control should be placed definitively on designated individuals.

- Each individual, unit, and situation should be under the immediate control of one, and only one, individual, thus achieving the principle of unity of command.
- Each assignment or duty should carry with it the authority necessary to fulfill the responsibility.
- Lines of demarcation between the responsibilities of units should be clearly drawn by a precise definition of the duties of each.
- Rank should increase one step at each level of the organization's structure and be consistent with the duties and responsibilities assigned to the position.
- Personnel who supervise others should hold supervisory rank.
- Qualified civilian employees should staff functions that can be performed by non-sworn personnel.
- Nontraditional or highly specialized functions should be established only if a demonstrated and ongoing need exists.

These principles, coupled with the knowledge of the community possessed by the chief and other NPD command personnel, should guide the development of an appropriate table of organization and the operational policies necessary for the direction of the department.

The NPD must be structured to perform its essential functions efficiently and effectively, within its fiscal restraints, consistent with the nature and particular needs of the community it serves. We will identify positions that should be funded to provide a recommended level of police service to the city without compromising officer safety. The timetable to implement these recommended changes is the responsibility of the city.

The ICMA team wishes to thank the officers and civilians of the Novi Police Department for their kind assistance in completing this project. In particular, we commend Chief Molloy and his administrative staff (Deputy Chief Lindberg and Lieutenants Lauria and Wuotinen) for their enthusiasm and their exceptional cooperation with the ICMA team during this study.

## **II. Overview**

We encountered a number of issues when analyzing the data supplied by the police department. We made assumptions and decisions to address these issues. We describe these issues in detail later in the Data Analysis section of this report. We will make recommendations for how to rectify these data issues. However, even with the limitations caused by these data issues, ICMA was able to develop a comprehensive analysis of police operations.

With regards to the internal functions of the agency, we had no such difficulties. The police department was able to provide the ICMA team with detailed information about all aspects of department operations and each member of the agency with whom we met was forthcoming and helpful.

We were struck particularly by the caliber of management and organization within the NPD. It is clear to us from our discussions and on-site visits that the agency has a clear sense of mission, that members of the department share this vision, and that there is a strong commitment to “best practices” and service to the community.



We believe the NPD is one of the better law enforcement agencies that we have had an opportunity to review.

Despite the high level of performance of NPD officers and management, we believe the present rank structure should be redefined and adjusted to prepare for future growth of the community. The present structure is nontraditional and problematic in that it lacks a significant command level staff/structure.

In the final section of this report, we will recommend and discuss a structure that will take the NPD in to the 21<sup>st</sup> century. We will provide a proposed table of organization and analysis in section V-H.

The proposed table of organization will not affect the level of service provided to the public; police officer safety; or citizen satisfaction with the department.

### ***Recommendations***

The ICMA team's report should act as a blueprint for both the city and police administrations. The City Administration should have periodic meetings with the NPD administration to ensure that our recommendations are implemented and followed up in a timely fashion.

## **III. Operations Analysis**

The Novi Police Department has 70 full-time sworn officers; 27 full-time civilians; 19 part time civilians; 2 Co-Ops; 8 crossing guards; and 9 cadet civilians.

Senior management staff is made up of one deputy chief and two police lieutenants, along with the chief of police. This structure puts significant responsibility and authority in the middle management of the organization. The two lieutenants have broad authority over a wide range of both line and staff functions. The ICMA study team believes that it may be necessary to reconfigure or restructure the department somewhat so that it can be divided into two distinct divisions comprised of the staff and line functions (i.e., Patrol, Investigations and Administrative/Support Functions). We will discuss this restructuring more fully at the end of this report.

#### **A. Patrol**

The patrol unit is the core of the police department and it is the most visible component. We found the patrol officers were well trained, enthusiastic, and in close touch with their assigned patrol areas. There appears to be the sense of personal responsibility for assigned patrol areas; this is a critical component of effective community policing.

One patrol lieutenant is responsible for managing the patrol function. The lieutenant also has additional staff responsibilities. There are four squads, broken into A and B units, with alternate work schedules.

The ICMA team believes the patrol division should be commanded by two lieutenants overlapping the A and B Squads. The lieutenants should work according to when calls for service dictate the highest volume of deployment. This would be a significant change. At present, one lieutenant works days and supervises the patrol day shift while other shifts are supervised after 4 PM by sergeants.

The department has the staff and the means to redeploy the supervisory personnel. If the recommendations we make are implemented, the 12-hour tour-of-duty will ensure that a patrol lieutenant will be able to observe a greater cross section of patrol function when calls for service are at their highest during the respective tours of duty. This change would also allow the police administration to flex the lieutenants' hours for coverage of special events.

## **B. Investigations**

Criminal investigators are vested with the responsibilities ordinarily associated with non-uniformed investigations and patrol activity. The investigators conduct follow-up on information gathered by the uniformed patrol force. The investigators also work closely with investigators from county, state, and federal agencies.

The normal course of action within the NPD is to assign a case to a single person as the principal investigator. While assigning more than one person to a case is not precluded by the department, assigning a case to one lead investigator is designed to place accountability for each case .

A lieutenant, assisted by one sergeant, is in command of criminal investigations. The sergeant is in charge of twelve detectives assigned to the criminal investigations: six detectives assigned to investigations, two detectives assigned to DARE/Crime Prevention, one school resource officer, two Detectives are assigned to the South Oakland Narcotics Consortium (SONIC), and one to the Drug Enforcement Administration

(DEA). Under terms of their contract, detectives work 8-hour tours-of-duty. They provide investigative coverage Monday through Friday and recalled for incidents that require their investigative expertise over the weekend. The sergeant assigned to the investigations occasionally assists with case investigations.

In 2008, the department's investigators handled 2,079 Part A Incidents, clearing 32.76 percent of the cases. According to the Michigan Incident Crime Reporting (MICR) Part A Incidents are the most serious offenses (e.g. murder, rape, robbery aggravated assault, burglary, larceny-theft and motor vehicle theft etc.).

NPD also handled 613 Part B Incidents, clearing 87.44 percent of the cases. According MICR, Part B Crimes are less serious offenses (e.g. fraud, peeping tom, family and children, liquor laws, disorderly conduct etc.)

The ICMA commends the NPD for their outstanding work effort in maintaining an excellent clearance rate. The national average clearance rate was recently published to be somewhere around 19%.

The crime scene investigators were also responsible for automatic fingerprint identification system (AFIS) and DNA hits involving criminal cases. The ICMA team commends the rank and file of the NPD for their forensic efforts in controlling crime.

In reviewing other police departments' benchmarks, we found that the NPD detectives were exceptional in the handling of the case workload, following up on each and every incident by contacting every victim.

Traditionally, the number of investigators assigned to investigations is about 10 to 12 percent of the patrol function; however, this number is arbitrary and not linked to practical data. The NPD patrol function presently consists of 42 officers. (Source: "What Every Chief Executive Should Know: Using Data to Measure Police Performance," by Jon M. Shane.)

The ICMA team found the criminal investigation function to be particularly goal-oriented, with a focus on long-range planning. This focus helps the department in fully understanding the investigative workload.

### **Recommendations**

The police administration should periodically (at a minimum monthly) review the detective's caseload to ensure that sufficient investigative personnel are assigned to the criminal investigation function. This will allow detectives to be assigned to investigate trends that may be occurring in the city such as car break-ins, robberies, larcenies, etc. and to adjust the caseload assigned to each investigator. The ICMA team noted that some trends of crime incidents were occurring but targeted intervention had not taken place. The department should also consider having detectives work on weekends because criminals and crime does not occur only during weekdays and, to be effective, detective units must interact with patrol officers.

### **C. Crime Statistics and the Uniform Crime Report (UCR)**

The police administration conducts daily administrative staff meetings with the chief and deputy chief to review vital information regarding

the UCR, CFS, traffic citations, crime rates, and clearances. These reviews must take place among a broader representation of the department's members.

### ***Recommendation***

We suggest the police administration explore the feasibility of implementing COMPSTAT meetings and involve in these meetings a broader cross section of department personnel. COMPSTAT is an acronym for Computer Statistics or Comparative Statistics. COMPSTAT is an organizational management tool that can be used to monitor and combat crime, particularly with the realignment and deployment of personnel. The program allows for a cross section of the department to provide input on issues and concerns and direct accountability surrounding the community (such as quality of life issues and concerns, crimes, and public relation and community services)

### **D. Crime Scene Technology**

The ICMA team was particularly impressed with the quality of the crime scene investigators (CSI). The CSI demonstrated a high degree of training, expertise, and enthusiasm. They are very successful in identifying suspects through latent print work using the automated fingerprint identification systems (AFIS) and DNA.

### **E. Human Resource Management**

The department is very sensitive to recognize performance and commitment, both among the sworn and civilian members of the department. We know that an individual officer's appearance sends a

strong message to members of the public (both victims and perpetrators) and it is clear that the agency's leadership understands the importance of a public image that matches its professional performance.

#### **F. Citizen Involvement**

The ICMA team was very impressed by the close interaction between the police department and community volunteers. The volunteers provide many thousands of hours of service to the city under the coordination of the police department, participating in a cross section of events and activities. Many police agencies publicly promote the concept of "community policing," but with little actual substance. It is clear that the NPD has a true partnership with the community and which is an integral part of the agency's strategy.

#### **G. Communications Center**

The communications center is a well-designed and a fairly modern facility that was receiving some technology updates during the ICMA team's visit. The civilian dispatchers assigned to the communications unit appear to be professionally trained. During our visit, they interacted well with citizens over the phone. The communications center is secure. The 911 center has five fully operational positions. The call accounting system can separate 911 calls from those on the administrative telephone lines. In 2008, the 911 dispatch center answered 30,077 calls and an additional 193,267 administrative line calls. The center experiences peaks in calls for service that result in longer-than-average times to transmit information to officers. The peaks occur on weekdays between 4 and 6 p.m. and on weekends

during the periods of 6 to 8 a.m., 2 to 4 p.m., and 10 to 12 p.m. The center dispatches fire and has been contracted by Community Emergency Medical Service (CEMS). It also dispatches for South Lyon fire Department and Lyon Police and Fire. The ICMA team commends the City of Novi for their efforts in providing shared and or consolidated services, exercising and illustrating fiscal restraint during these economic times.

This unit is responsible for managing the computer assisted dispatch / records management system (CAD/RMS). It is here that we believe an opportunity exists to greatly improve the department's data management which would give police managers, as well as city officials, a greater understanding of calls for service, deployment, and response times.

#### **H. Equipment and Facilities**

The city has invested heavily in equipment for its police department. The police station is adequate and well designed, clean, and properly maintained. It provides the right mix of security and accessibility. In speaking with the officers, it is clear that they feel a great deal of pride in their department, the building, and assigned equipment. There is an adage in law enforcement that "a police facility is a tool not just a shelter." The facility meets the needs of the agency well into the future. Police vehicles appear well maintained; they are clean, well equipped, and properly marked for visibility and safety. Police vehicles are stored outside. We did notice that some equipment in the mechanic areas was not stored properly and this should be addressed as soon as practical. (For example, we saw flares inside the mechanics' work areas and first-aid supplies left in the open.)



## **IV. Data Analysis**

This is the data analysis report on police operations for Novi, Michigan, conducted by ICMA Consulting Services. This report focuses its analysis on workload, deployment, and response times. These three areas are nearly exclusive to patrol operations, which constitute by far the bulk of the police department's personnel and financial commitment.

All information in this report was developed directly from data recorded in the department's dispatch center. The purpose of this report is to provide the city with our findings and to allow the police department to review and bring to our attention any dispatch information that may be inconsistent with other internal records of the agency.

The first section of the report, concluding with Table 8, uses call and activity data for the entire year (2008). For the detailed workload analysis and the response time analysis, we have used two 4-week sample periods. The first period was the month of February 2008 (February 1 to February 28), or *winter*, and the second period was the month of August 2008 (August 1 to August 28), or *summer*.

We make no recommendations in this portion of the final report; our purpose here is to share information that we have developed from the source data to confirm its accuracy.

## A. Workload Analysis

We encountered a number of issues when analyzing the data supplied by the police department, thus we made assumptions and decisions to address them. These issues, assumptions, and decisions are

- A small but significant percentage of calls involving patrol units had zero time on scene (3.2 percent).
- The dispatch center's software generates a large number of call codes. This led to 106 different types of call descriptions, which we reduced to 15 categories for our tables and 9 categories for our figures.
- Arrival times were missing for a small proportion of calls (2.2 percent or approximately 1,500 calls for the year). For these, we could not calculate a valid response time or on-scene time.

Our study team often has worked with many of these problems with call-for-service data. To identify calls that were canceled en route, we assumed zero time on scene to account for a significant portion of them. Any call with an on-scene time of less than 30 seconds was labeled *zero on scene*. We also used the information stored within the dispatch records' source field to distinguish between patrol-initiated (also known as "field initiated") and other-initiated calls.

Before describing the workload analysis, we briefly review the data received. In the period from July 2007 to June 2008, there were approximately 71,100 calls for service (with accompanying unit

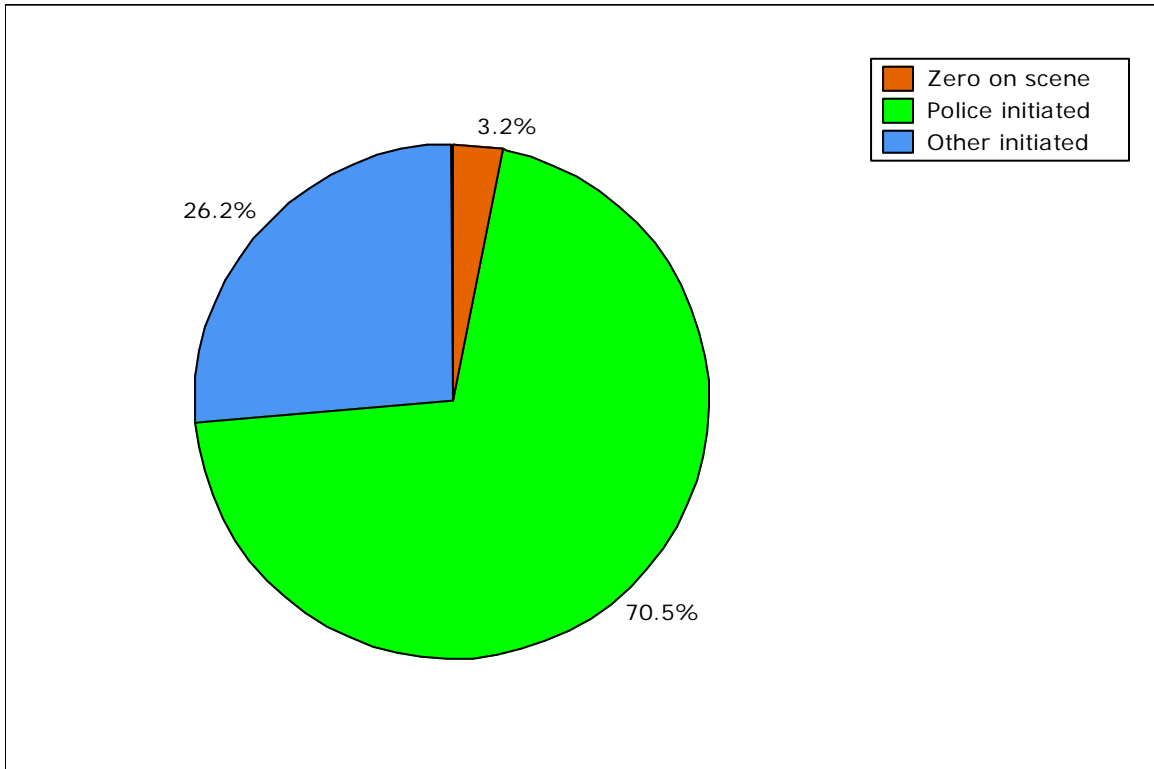
information). Of the total calls, approximately 69,100 included a patrol unit either as the primary responder or as a secondary unit. When focusing on our 4-week periods, we analyzed 4,358 (patrol-related) calls in February 2008 and 6,127 calls in August 2008. In addition, when analyzing workloads and response times, we ignored calls with incorrect or missing time data. The inaccuracies included elapsed times that either were negative or exceeded 8 hours. For the entire year, this excluded fewer than 100 calls (less than 0.2 percent) from our analysis.

In 2008, the police department reported 189 calls for service per day. As mentioned, about 3.2 percent of these calls show no officer time spent on the call.

In the following pages we show two types of data: activity and workload. The activity levels are measured by the average number of calls per day, broken down by the type and origin of the calls and categorized by the nature of the calls (crime, traffic). Workloads are measured in average work-hours per day. The following tables use 15 call categories. For the graphs, some of these categories are consolidated to 9 distinct categories. We show our categories chart on the next page.

<b>Table categories</b>	<b>Figure categories</b>
Accidents	Traffic
Traffic enforcement	
Alarm	Investigations
Check/investigation	
Animal calls	General noncriminal
Miscellaneous	
Assist other agency	Assist other agency
Crime—persons	Crime
Crime—property	
Directed patrol	Directed patrol
Disturbance	Suspicious incident
Suspicious person/vehicle	
Juvenile	Juvenile
Out of service—administrative	Out of service
Out of service—personal	
Prisoner—arrest	Arrest
Prisoner—transport	

**Figure 1. Percentage Calls per Day, by Initiator**



*Note.* Percentages are based on a total of 69,055 calls.

**Table 1. Calls per Day by, Initiator**

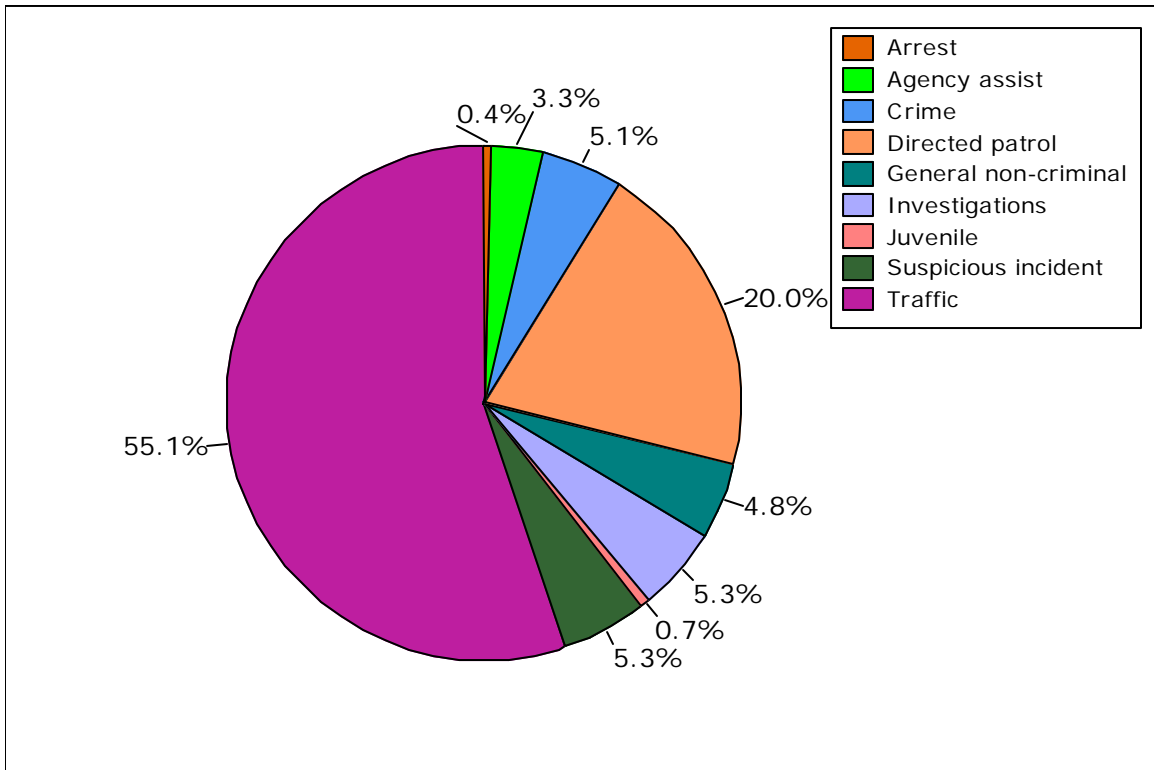
<b>Initiator</b>	<b>Total calls</b>	<b>Calls per day</b>
Zero on scene	2,225	6.1
Police initiated	48,708	133.4
Other initiated	18,122	49.6
<b>Total</b>	<b>69,055</b>	<b>189.2</b>

*Note.* Table excludes 5 calls with missing time data.

Observations:

- About 3.2 percent of the calls involved zero on-scene time and are included in these numbers as well as the next figure and table. Later, we will exclude calls with zero on-scene time.
- The data records include a large number of police-initiated activities: 133 per day, or about 70 percent of all activities.
- There were a total of 189 calls per day, or 7.9 per hour.

**Figure 2. Percentage Calls per Day, by Category**



**Table 2. Calls per Day, by Category**

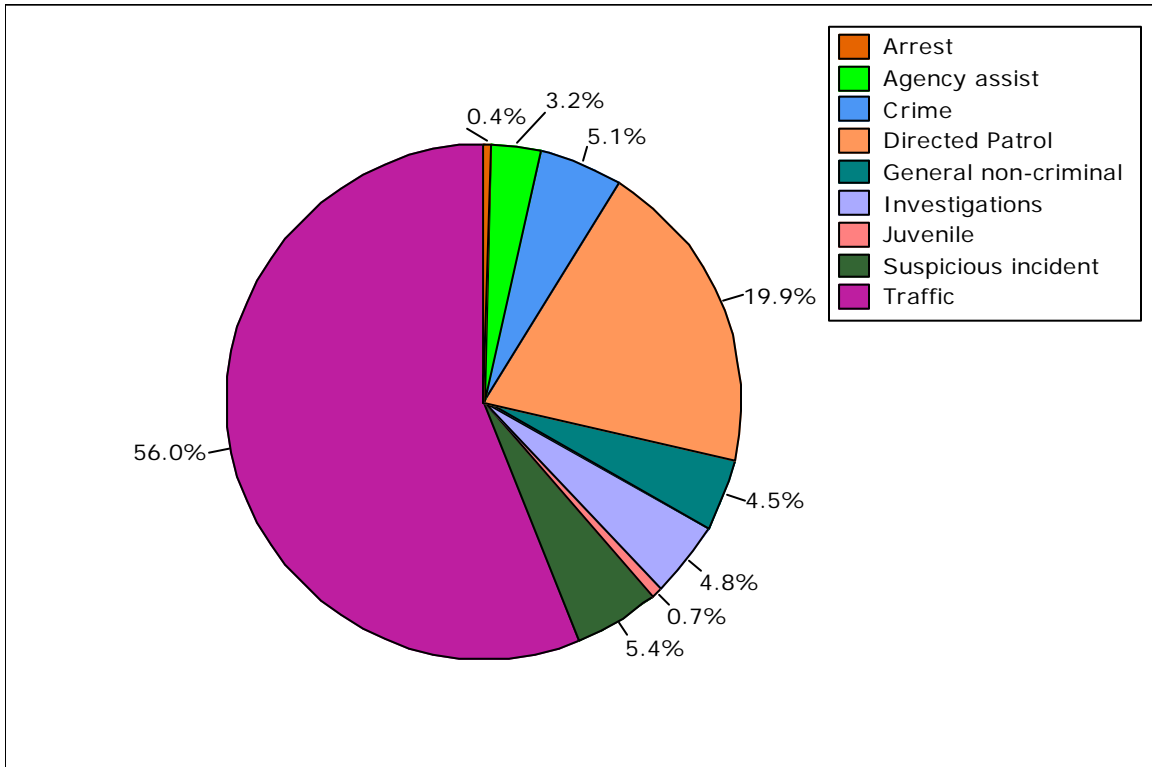
<b>Category</b>	<b>Total calls</b>	<b>Calls per day</b>	<b>% of Total</b>
Accidents	2,292	6.3	3.3%
Alarm	3,054	8.3	4.4%
Animal calls	587	1.6	0.8%
Assist other agency	2,264	6.2	3.3%
Check/investigation	583	1.6	0.8%
Crime—persons	1,148	3.1	1.6%
Crime—property	2,388	6.5	3.4%
Directed patrol	13,804	37.7	20.0%
Disturbance	1,144	3.1	1.6%
Juvenile	459	1.3	0.7%
Miscellaneous	2,723	7.4	3.9%
Prisoner—arrest	284	0.8	0.4%
Suspicious person/vehicle	2,538	6.9	3.7%
Traffic enforcement	35,787	97.8	51.8%
<b>Total</b>	<b>69,055</b>	<b>188.7</b>	<b>100.0%</b>

Observations:

- Two categories (traffic and directed patrol) accounted for 75 percent of activities.
- 55 percent of calls were traffic related.
- 20 percent of calls were directed patrol including public relations activities.
- 5 percent of calls involved crimes.



**Figure 3. Percentage Nonzero Calls per Day, by Category**



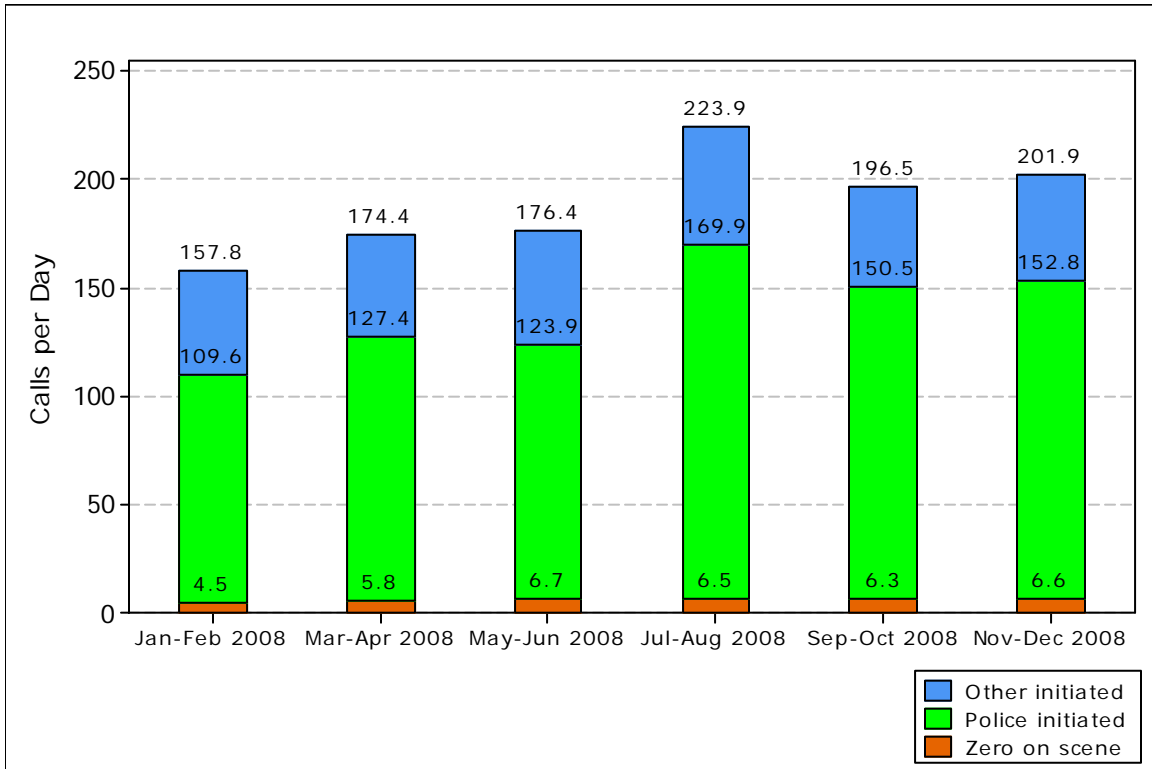
**Table 3. Nonzero Calls per Day, by Category**

<b>Category</b>	<b>Total calls</b>	<b>Calls per day</b>	<b>Percentage</b>
Accidents	2,204	6.0	3.3%
Alarm	2,692	7.4	4.0%
Animal calls	575	1.6	0.9%
Assist other agency	2,115	5.8	3.2%
Check/investigation	539	1.5	0.8%
Crime—persons	1,128	3.1	1.7%
Crime—property	2,308	6.3	3.5%
Directed patrol	13,314	36.4	19.9%
Disturbance	1,128	3.1	1.7%
Juvenile	439	1.2	0.7%
Miscellaneous	2,432	6.6	3.6%
Prisoner—arrest	282	0.8	0.4%
Suspicious person/vehicle	2,466	6.7	3.7%
Traffic enforcement	35,208	96.2	52.7%
<b>Total</b>	<b>66,830</b>	<b>182.6</b>	<b>100.0%</b>

Observations:

- When zero-on-scene calls are excluded, there are 183 calls per day, or 7.6 per hour.
- The top two categories and their percentages remain essentially unchanged.

**Figure 4. Calls per Day, by Initiator and by Months**



**Table 4A. Calls per Day, by Initiator and by Months  
(January to December 2008)**

Initiator	Jan-Feb	Mar-Apr	May-Jun	Jul-Aug	Sep-Oct	Nov-Dec
Zero on scene	4.5	5.8	6.7	6.5	6.3	6.6
Police initiated	105.1	121.5	117.2	163.3	144.2	146.2
Other initiated	48.3	47.1	52.6	54.0	46.0	49.1
<b>Total</b>	<b>157.8</b>	<b>174.4</b>	<b>176.4</b>	<b>223.9</b>	<b>196.5</b>	<b>201.9</b>

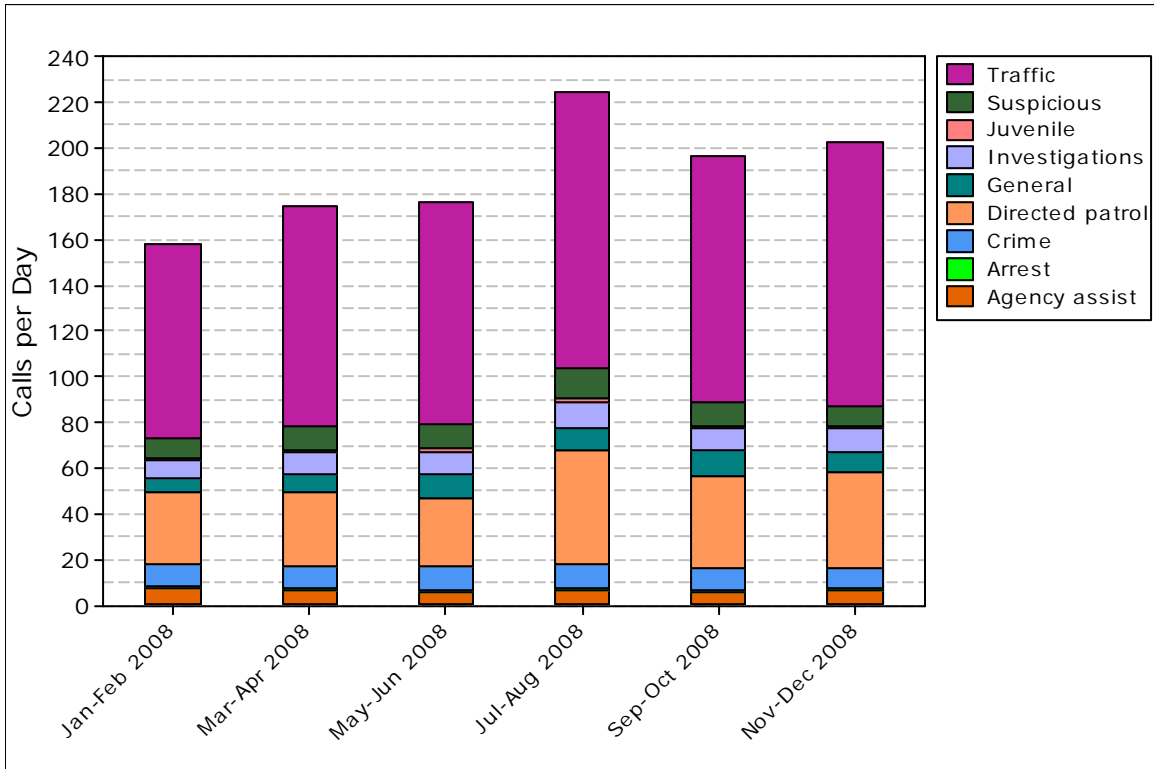
**Table 4B. Percentage Calls per Day, by Initiator and by Months  
(January to December 2008)**

<b>Initiator</b>	<b>Jan-Feb</b>	<b>Mar-Apr</b>	<b>May-Jun</b>	<b>Jul-Aug</b>	<b>Sep-Oct</b>	<b>Nov-Dec</b>
Zero on scene	2.8%	3.3%	3.8%	2.9%	3.2%	3.3%
Police initiated	66.6%	69.7%	66.4%	72.9%	73.4%	72.4%
Other initiated	30.6%	27.0%	29.8%	24.1%	23.4%	24.3%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

Observations:

- The number of calls was largest from July to August.
- The number of calls was the smallest from January to February.
- The largest months had 42 percent more calls than the smallest.
- The primary cause for this large difference was that there were over 163 police initiated activities per day in Jul-Aug as compared to only 105 in Jan-Feb.
- In contrast, for these same months, the increase in other initiated calls was only 6 calls per day.

**Figure 5. Calls per Day, by Category and by Months**



**Table 5A. Calls per Day, by Category and by Months**

<b>Category</b>	<b>Jan- Feb</b>	<b>Mar -Apr</b>	<b>May -Jun</b>	<b>Jul- Aug</b>	<b>Sep -Oct</b>	<b>Nov- Dec</b>
Accidents	7.1	5.6	6.2	5.2	5.4	8.1
Alarm	7.8	8.0	8.8	9.1	7.3	9.1
Animal Calls	1.0	1.7	2.1	2.1	1.4	1.3
Assist Other Agency	6.9	6.5	5.6	6.1	5.6	6.4
Check/Investigation	0.8	1.5	1.0	2.5	2.3	1.4
Crime-Persons	3.0	3.7	3.0	3.3	3.0	2.8
Crime-Property	6.5	6.0	7.1	7.3	6.3	6.0
Directed Patrol	31.6	32.0	30.2	49.5	40.7	42.0
Disturbance	2.4	3.3	4.2	4.4	2.4	2.0
Juvenile	0.9	1.5	1.7	1.7	1.0	0.7
Miscellaneous	5.0	6.2	7.9	7.6	9.9	8.0
Prisoner-Arrest	0.8	0.7	0.8	1.0	0.8	0.5
Suspicious Person/Vehicle	5.9	6.5	6.8	8.5	7.3	6.5
Traffic Enforcement	78.1	91.1	91.1	115.5	103.0	107.1
<b>Total</b>	<b>157.8</b>	<b>174.4</b>	<b>176.4</b>	<b>223.9</b>	<b>196.5</b>	<b>201.9</b>

**Table 5B. Calls per Day, by Category and by Months**

<b>Category</b>	<b>Jan-Feb</b>	<b>Mar-Apr</b>	<b>May-Jun</b>	<b>Jul-Aug</b>	<b>Sep-Oct</b>	<b>Nov-Dec</b>
Accidents	4.5%	3.2%	3.5%	2.3%	2.8%	4.0%
Alarm	5.0%	4.6%	5.0%	4.1%	3.7%	4.5%
Animal Calls	0.6%	1.0%	1.2%	0.9%	0.7%	0.6%
Assist Other Agency	4.3%	3.8%	3.2%	2.7%	2.9%	3.2%
Check/Investigation	0.5%	0.9%	0.5%	1.1%	1.2%	0.7%
Crime-Persons	1.9%	2.1%	1.7%	1.5%	1.5%	1.4%
Crime-Property	4.1%	3.4%	4.0%	3.2%	3.2%	3.0%
Directed Patrol	20.0%	18.3%	17.1%	22.1%	20.7%	20.8%
Disturbance	1.5%	1.9%	2.4%	2.0%	1.2%	1.0%
Juvenile	0.6%	0.8%	0.9%	0.8%	0.5%	0.4%
Miscellaneous	3.2%	3.5%	4.5%	3.4%	5.0%	3.9%
Prisoner-Arrest	0.5%	0.4%	0.5%	0.5%	0.4%	0.3%
Suspicious Person/Vehicle	3.7%	3.8%	3.8%	3.8%	3.7%	3.2%
Traffic Enforcement	49.5%	52.2%	51.7%	51.6%	52.4%	53.0%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

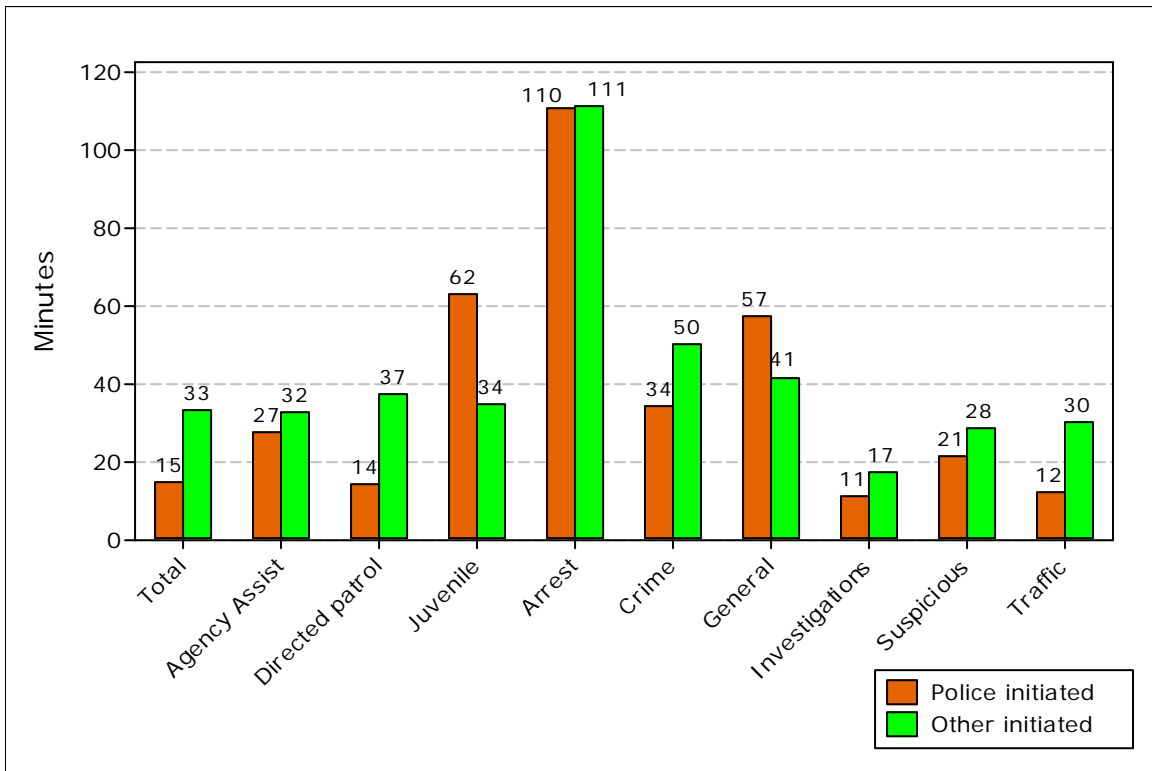
Observations:

- Traffic-related calls, followed by directed patrols, were the most common types of calls throughout the year.
- Traffic-related calls (enforcement and accidents) in general averaged between 85 and 121 per day throughout the year.

- Together, traffic-related calls (enforcement and accidents) and directed patrols day were consistently between 72 and 78 percent of all calls.
- Crime calls vary between 9 and 11 per day throughout the year. This was between 4 and 6 percent of total calls.



**Figure 6. Average Busy Times, by Category and Initiator**



**Table 6. Average Busy Times, by Category and Initiator**

Category	Police initiated		Other initiated	
	Total calls	Minutes	Total calls	Minutes
Accidents	142	39.4	2,062	42.5
Alarm	10	18.2	2,682	15.0
Animal calls	16	20.0	559	26.6
Assist other agency	406	27.1	1,707	32.4
Check/investigation	217	10.5	322	31.7
Crime—persons	20	39.3	1,108	53.2
Crime—property	245	33.2	2,063	47.9
Directed patrol	13,149	14.0	164	36.9
Disturbance	84	12.7	1,044	28.1
Juvenile	35	62.5	404	34.5

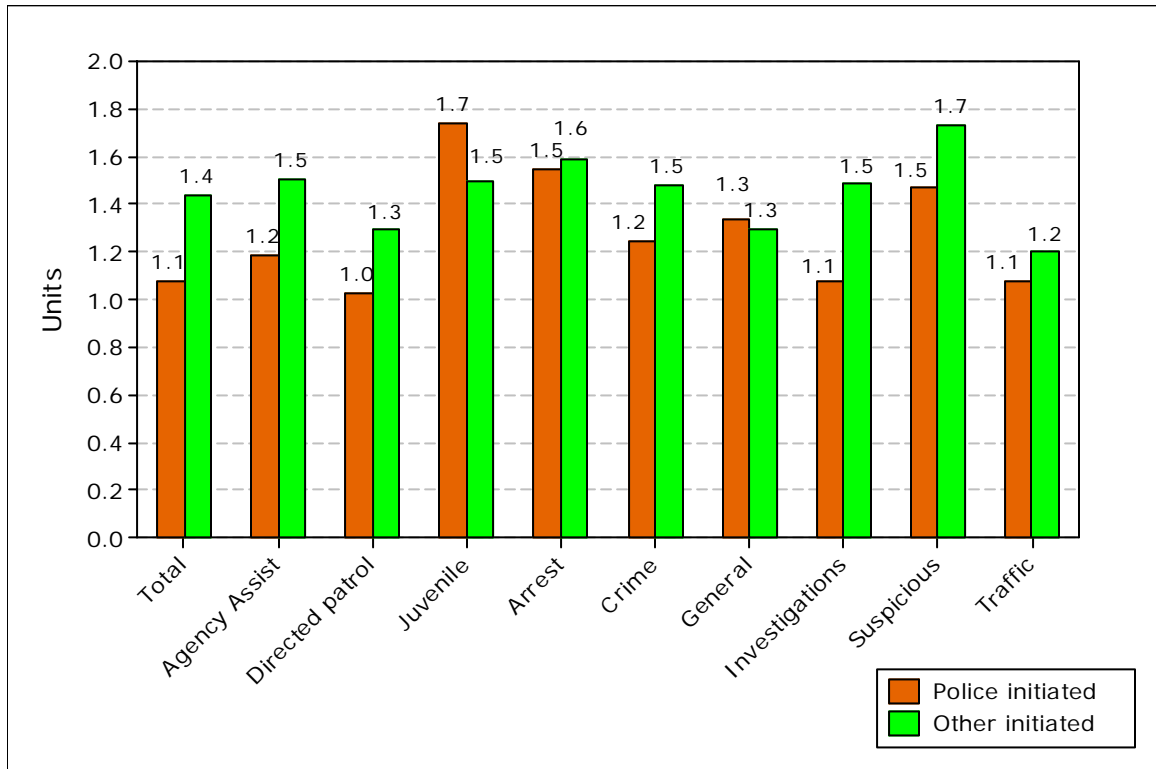
Miscellaneous	1,584	57.2	800	51.6
Prisoner—arrest	156	110.2	125	110.8
Suspicious person/vehicle	165	25.1	2,301	28.4
Traffic enforcement	32,440	11.7	2,766	20.4
<b>Total</b>	<b>48,669</b>	<b>14.5</b>	<b>18,107</b>	<b>32.7</b>

*Note.* Figure 6 and Table 6 exclude zero-on-scene calls.

Observations:

- A unit's busy time is measured as the time from when it is dispatched until it becomes available.
- The times shown above are the average busy times per call for the primary unit, rather than the total busy time for all units assigned to a call.
- Average time spent on a call ranged from 11 to 111 minutes overall, with significant variation by call type and initiator.
- The longest average times spent were 110 or more minutes on arrests and 88 minutes on police-initiated calls involving crimes against persons.
- Police-initiated traffic-related calls averaged 12 minutes per call, whereas other-initiated traffic calls averaged 30 minutes.
- Crime calls averaged 34 minutes for police-initiated calls and 50 minutes for other-initiated calls.

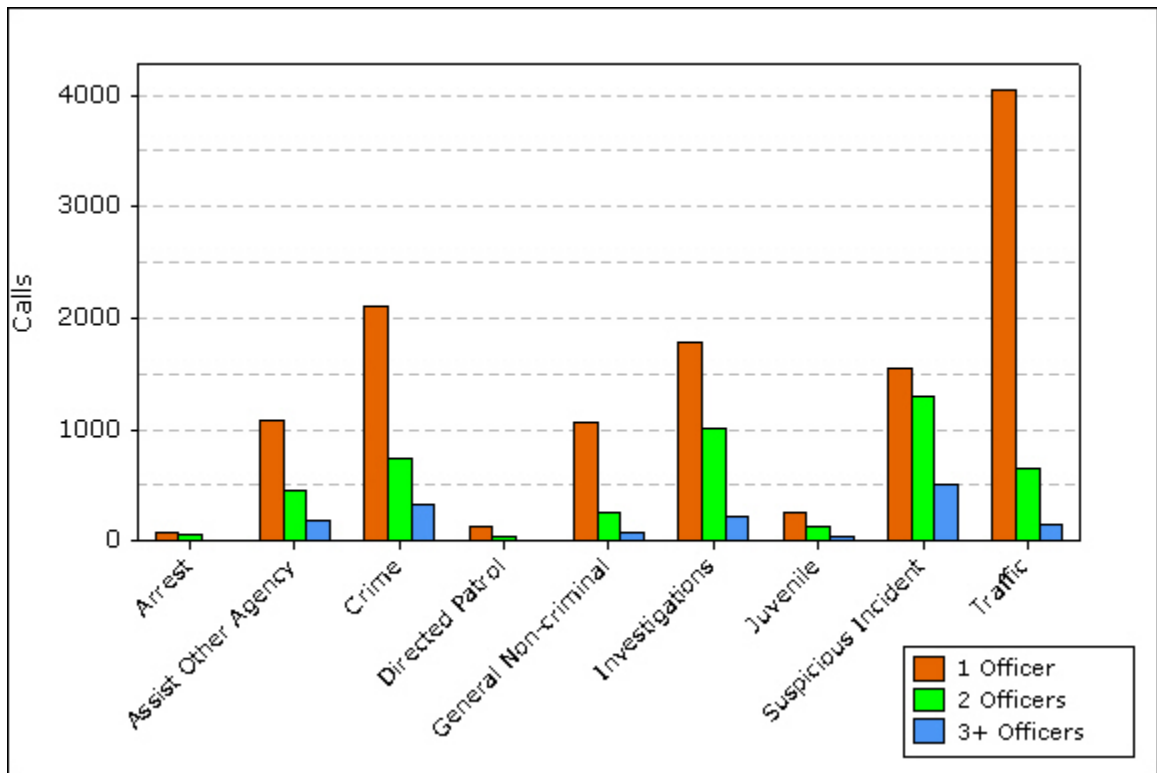
**Figure 7. Number of Responding Units, by Initiator and Category**



**Table 7. Number of Responding Units, by Initiator and Category**

Category	Police initiated		Other initiated	
	Average	Total Calls	Average	Total Calls
Accidents	1.2	142	1.3	2,062
Alarm	1.4	10	1.5	2,682
Animal Calls	1.2	16	1.2	559
Assist Other Agency	1.2	407	1.5	1,708
Check/Investigation	1.1	217	1.3	322
Crime-Persons	1.6	20	1.9	1,108
Crime-Property	1.2	245	1.3	2,063
Directed Patrol	1.0	13,150	1.3	164
Disturbance	1.3	84	1.9	1,044
Juvenile	1.7	35	1.5	404
Miscellaneous	1.3	1,619	1.4	813
Prisoner-Arrest	1.5	156	1.6	126
Suspicious Person/Vehicle	1.6	165	1.6	2,301
Traffic Enforcement	1.1	32,442	1.2	2,766
<b>Total</b>	<b>1.1</b>	<b>48,708</b>	<b>1.4</b>	<b>18,122</b>

Figure 8. Number of Units Responding, by Category



**Table 8. Number of Units Responding, by Category**

Category	Responding units		
	One	Two	Three or more
Accidents	1,643	328	91
Alarm	1,536	953	193
Animal calls	486	62	11
Assist other agency	1,077	452	179
Check/investigation	253	55	14
Crime—persons	448	430	230
Crime—property	1,653	310	100
Directed patrol	125	31	8
Disturbance	343	489	212
Juvenile	250	122	32
Miscellaneous	573	182	58
Prisoner—arrest	64	54	8
Suspicious person/vehicle	1,203	811	287
Traffic enforcement	2,395	325	46
<b>Total</b>	<b>12,049</b>	<b>4,604</b>	<b>1,469</b>

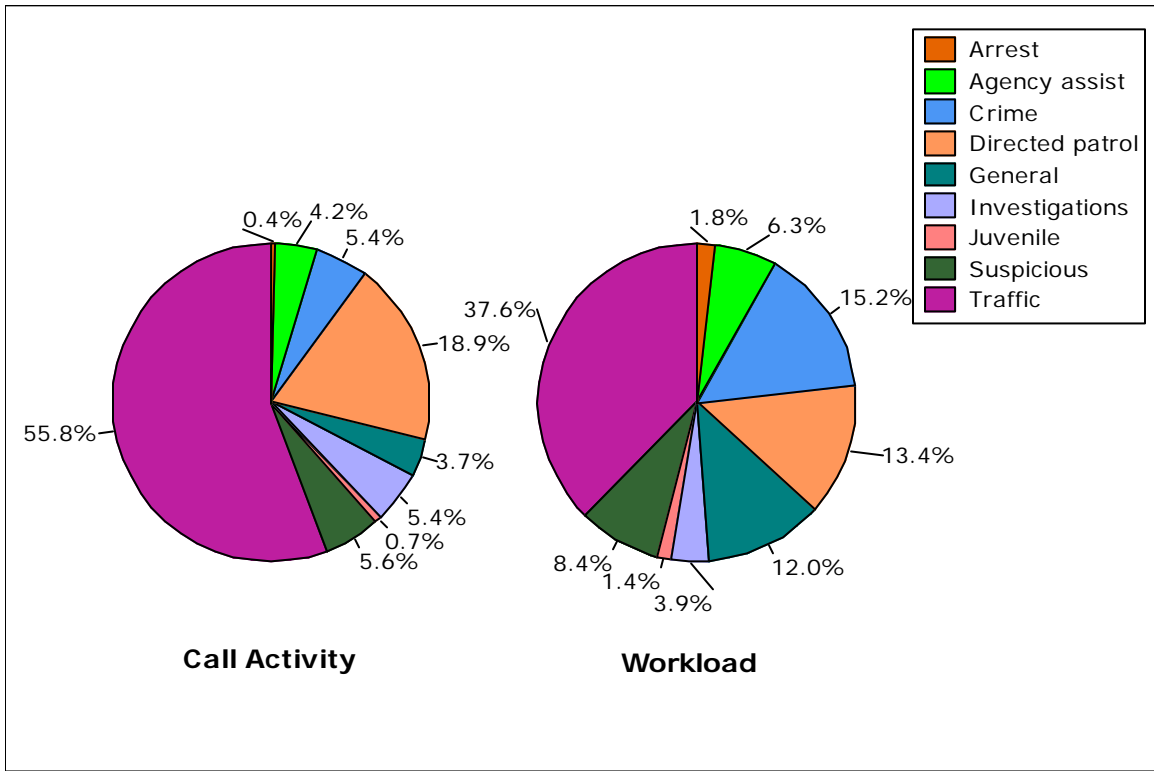
*Note.* Figure 8 and Table 8 include other-initiated calls.

Observations:

- The overall mean number of responding units was 1.1 for police-initiated calls and 1.4 for other-initiated calls.
- The mean number of responding units was a maximum of 1.9, for other-initiated calls involving crimes against persons and disturbances.
- Most other-initiated calls involved one responding unit (66 percent).

- Only 8 percent of all calls involved three or more units.
- The largest group of calls with three or more responding units involved suspicious incidents.

**Figure 9. Percentage Calls and Work-hours, by Category, in February 2008**



*Note.* Calculations include only nonzero on-scene calls.



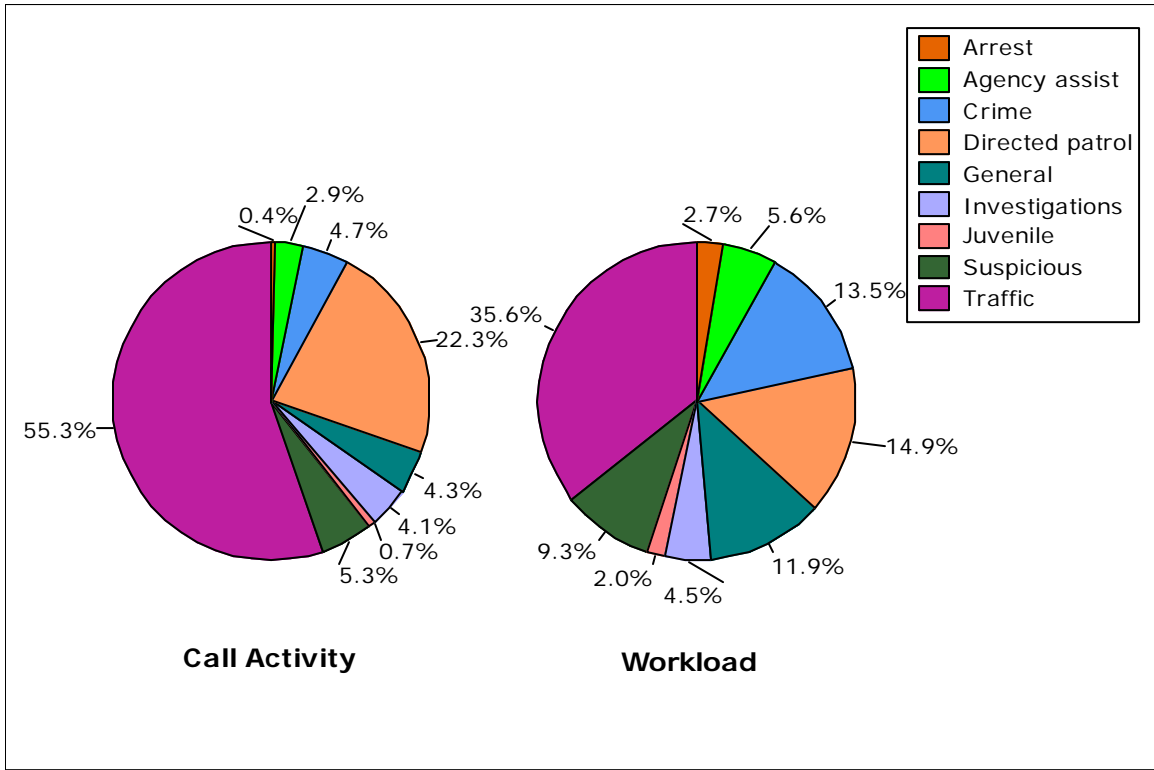
**Table 9. Calls and Work-hours per Day, by Category, in February 2008**

Category	Per day	
	Calls	Work-hours
Arrest	0.6	1.1
Assist other agency	6.3	3.8
Crime	8.1	9.3
Directed patrol	28.4	8.2
General Noncriminal	5.5	7.3
Investigations	8.1	2.4
Juvenile	1.0	0.8
Suspicious incident	8.5	5.1
Traffic	83.8	23.0
<b>Total</b>	<b>150.3</b>	<b>61.1</b>

Observations:

- Total calls were 150.3 per day, or 6.3 per hour.
- Total workload was 61.1 work-hours per day. This meant that an average of 2.5 personnel per hour were busy responding to calls.
- Traffic-related events constituted 56 percent of calls but only 38 percent of workload.
- Crimes constituted 5 percent of calls but 15 percent of workload.
- Directed patrols were 19 percent of calls and 13 percent of workload.

**Figure 10. Percentage Calls and Work-hours, by Category, in August 2008**



*Note.* Calculations includes only nonzero on-scene calls.

**Table 10. Calls and Work-hours per Day, by Category, in August 2008**

Category	Per day	
	Calls	Work-hours
Arrest	0.8	2.2
Assist other agency	6.3	4.5
Crime	9.9	11.0
Directed patrol	47.6	12.1
General Noncriminal	9.1	9.7
Investigations	8.6	3.7
Juvenile	1.5	1.6
Suspicious incident	11.4	7.5
Traffic	117.9	28.8
<b>Total</b>	<b>213.1</b>	<b>81.1</b>

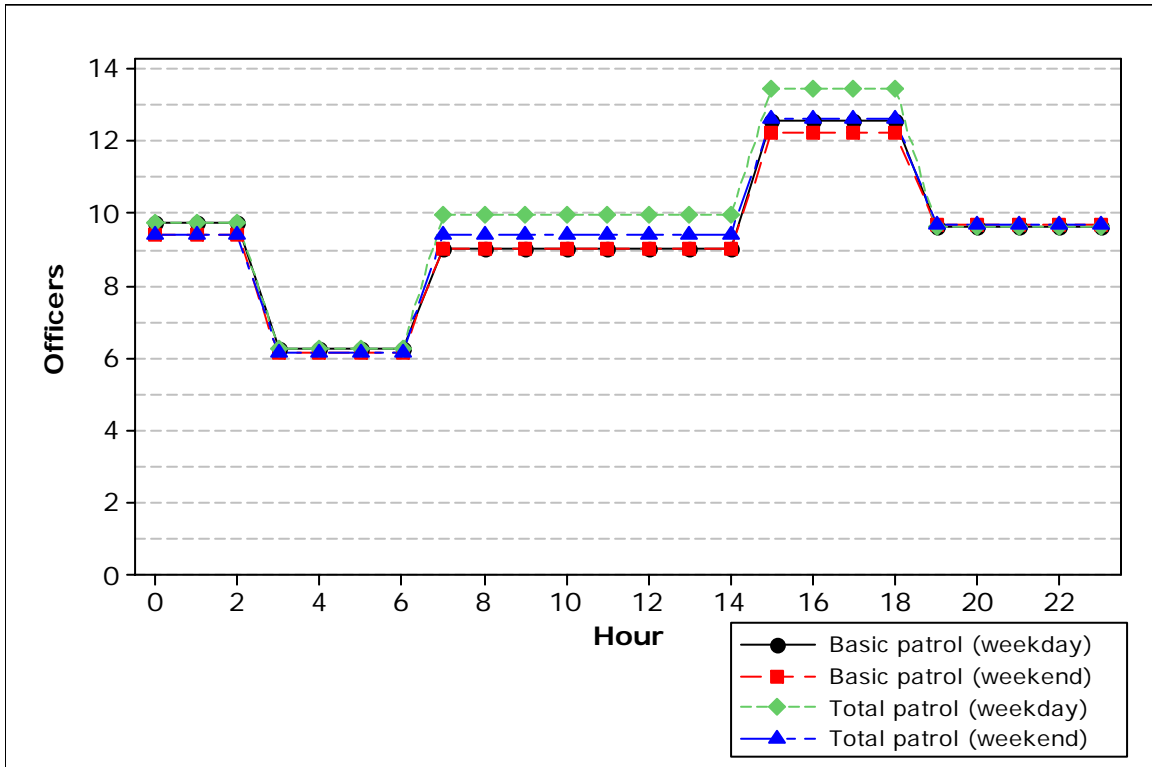
Observations:

- In August, the total calls and workload were significantly higher than in February.
- Total calls were 213.1 per day, or 8.9 per hour. This was 42 percent higher than in February.
- Total workload was 81.1 work-hours per day, or 3.4 personnel per hour. This was 33 percent higher than in February.
- There were no significant differences in the percent of calls by category between August 2008 and February 2008

## **B. Deployment**

The department operates with three 12-hour shifts starting at 7 AM (day shift), 3 PM (swing shift), and 7 PM (night shift). Along with regular patrol officers, we included units assigned to traffic enforcement. We did not include the work of school resource officer or his schedule in our analysis. Within the patrol unit, we included both officers and supervisors. In other words, we included all officers and supervisors from the rank of sergeant and below within our analysis. The department deployed an average of 9.3 patrol officers during the 24 hour day in February 2008 and 8.7 patrol officers in August 2008. When including the additional units, the department deployed an average of 9.7 and 8.9 officers during the 24-hour day in February 2008 and August 2008, respectively. The deployment varied both by season and between weekends and weekdays. It varied more by time of day.

**Figure 11. Deployed Officers, by Day of Week, in Feb. 2008**



**Observations:**

- The average patrol deployment was approximately 9 patrol officers during the week and on weekends.
- During the week, deployment reached as high as 13 officers and dropped as low as 6 officers.
- On the weekends, deployment reached as high as 12 officers and dropped as low as 6 officers.
- Highest deployments occur as the swing shift begins at 3 PM and overlaps with the day shift.
- Lowest deployments occur when the swing shift ends at 3 AM as the night shift continues.
- When additional units (e.g. traffic) were added, the average deployment rose by 0.5 officers on weekdays.

Figure 12. Deployment and Workload-Weekdays, Feb. 2008

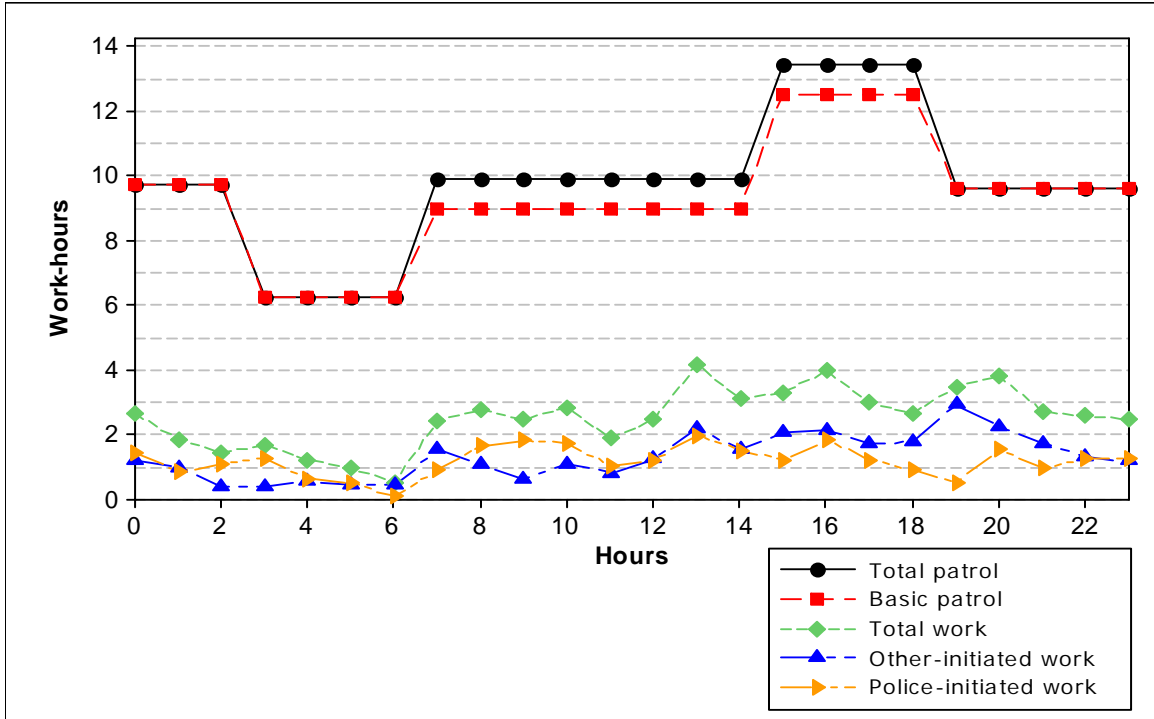
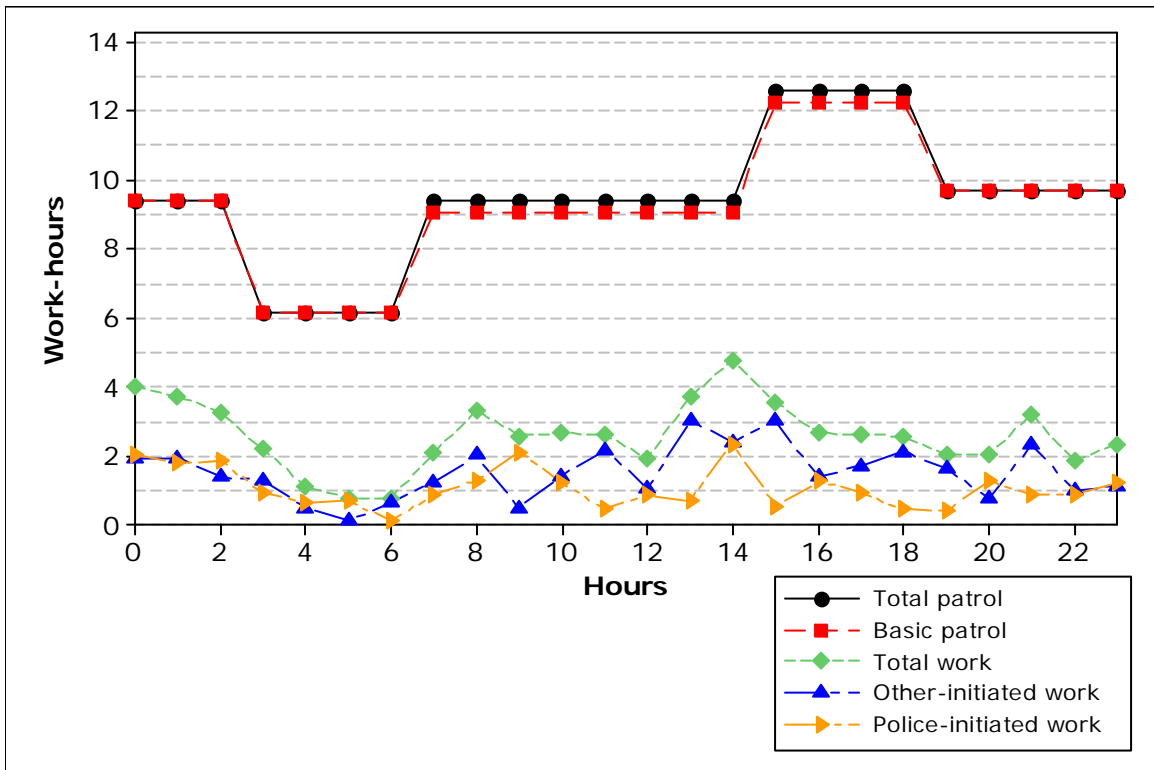


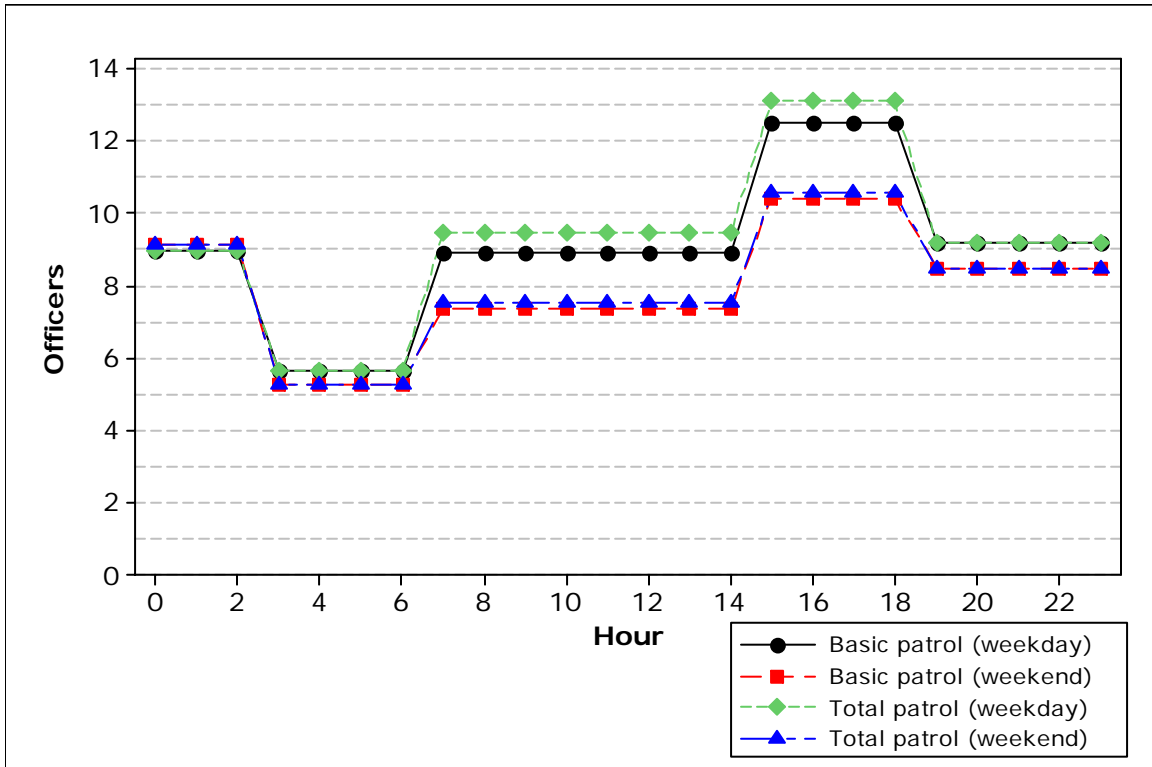
Figure 13. Deployment and Workload-Weekends, Feb. 2008



Observations:

- During the week, patrol workload averaged 2.5 personnel per hour.
- This was 26 percent of total deployment. This means that patrol officers spent 26 percent of their time on patrol-related activities.
- During the week, patrol workload dropped as low as 9 percent of total deployment between 6 AM and 7 AM. It was as high as 42 percent of total deployment between 1 PM and 2 PM.
- On the weekends, patrol workload averaged 2.6 personnel per hour.
- This was 27 percent of total deployment.
- On the weekends, the patrol workload dropped as low as 13 percent of total deployment between 5 AM and 7 AM and rose as high as 50 percent of total deployment between 2 PM and 3 PM.

**Figure 14. Deployed Officers, by Day of Week, Aug. 2008**



**Observations:**

- The number of officers deployed was lower in August than in February.
- There was an average of 9 officers deployed during the week and an average of 8 officers deployed on weekends in August.
- Basic deployment varied between 6 and 13 officers during the week and between 5 and 10 officers on weekends.
- When additional units (traffic) were added, the deployment rose as in February.
- Total deployment reached a maximum of 13 officers during the week and 11 officers on weekends.



Figure 15. Deployment and Workload-Weekdays, Aug. 2008

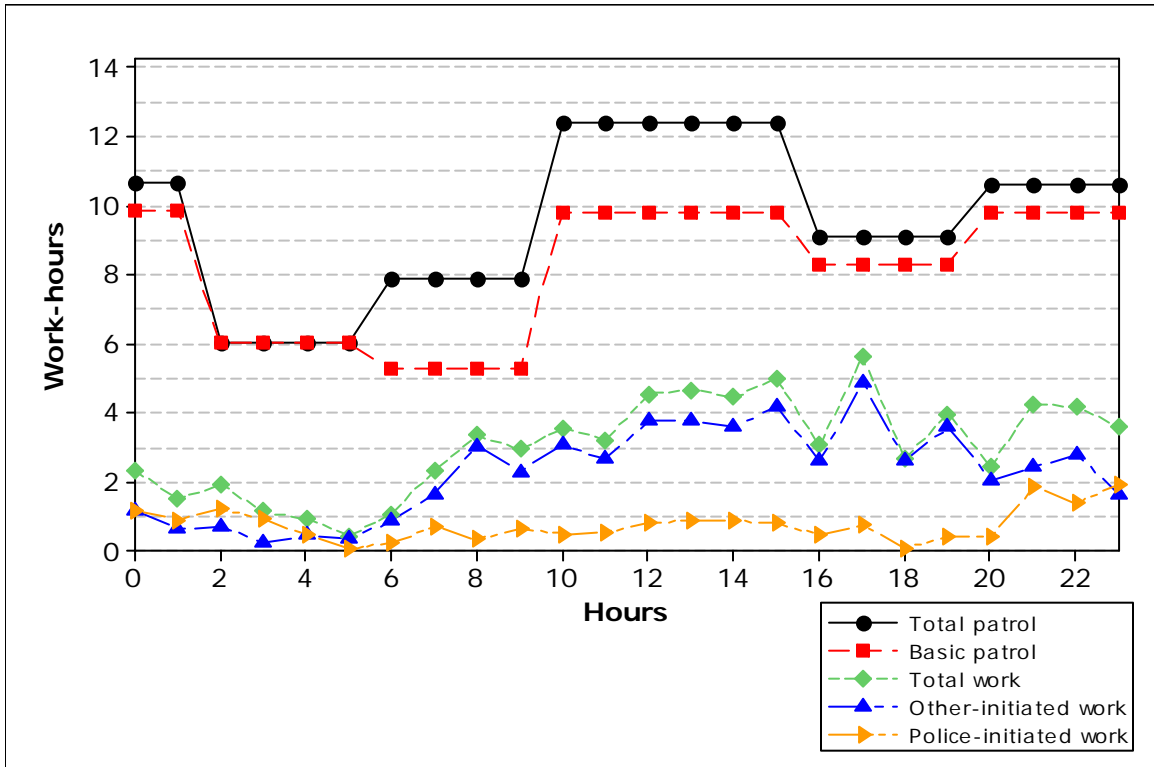
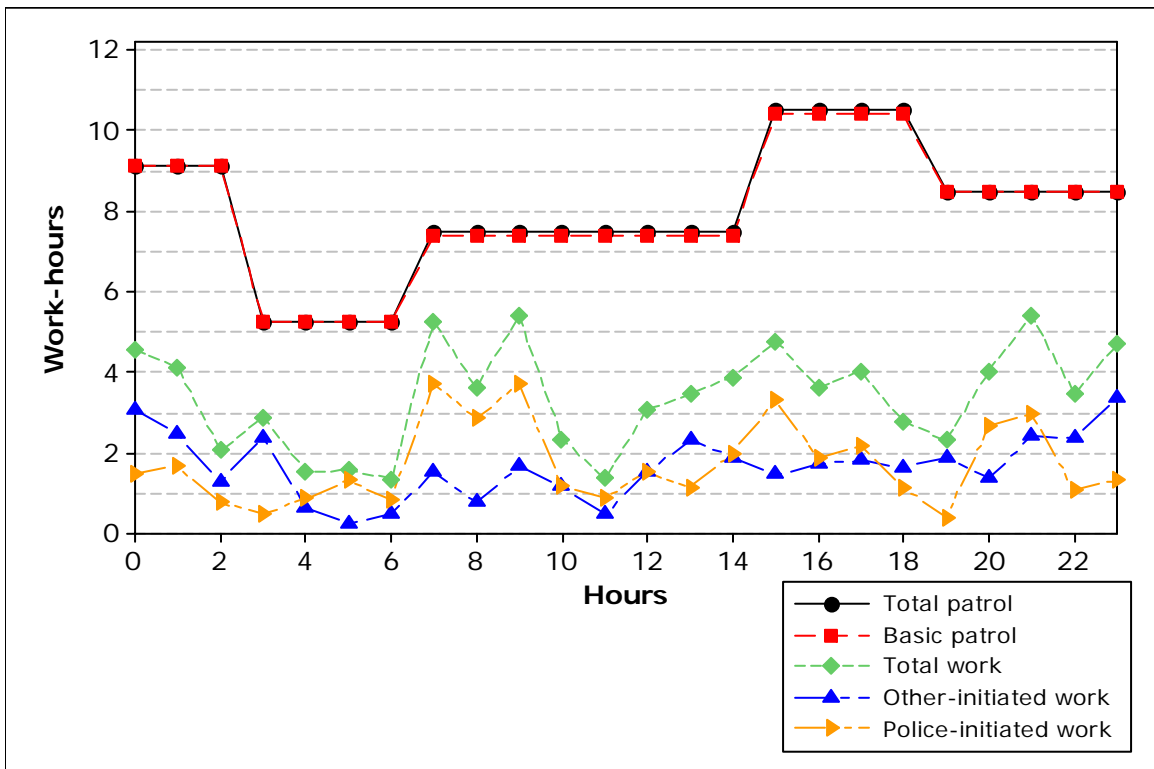


Figure 16. Deployment and Workload-Weekends, Aug. 2008



Observations:

- During August, workload was significantly higher (30 to 40 percent) than in February.
- In contrast, patrol deployment was either the same or slightly lower.
- During the week and on the weekends, patrol workload averaged 3.4 personnel per hour.
- During the week, this was 36 percent of total deployment. This means that patrol officers spent 36 percent of their time on patrol-related activities.
- During the week, patrol workload dropped as low as 15 percent of total deployment between 6 AM and 7 AM and rose as high as 52 percent of total deployment between 9 PM and 10 PM.
- On the weekend, the average workload (3.4 personnel) was 42 percent of total deployment.
- On the weekends, the patrol workload dropped as low as 18 percent of total deployment at between 11 AM and noon and rose as high as 72 percent of total deployment between 9 AM and 10 AM.

### **C. Response Times**

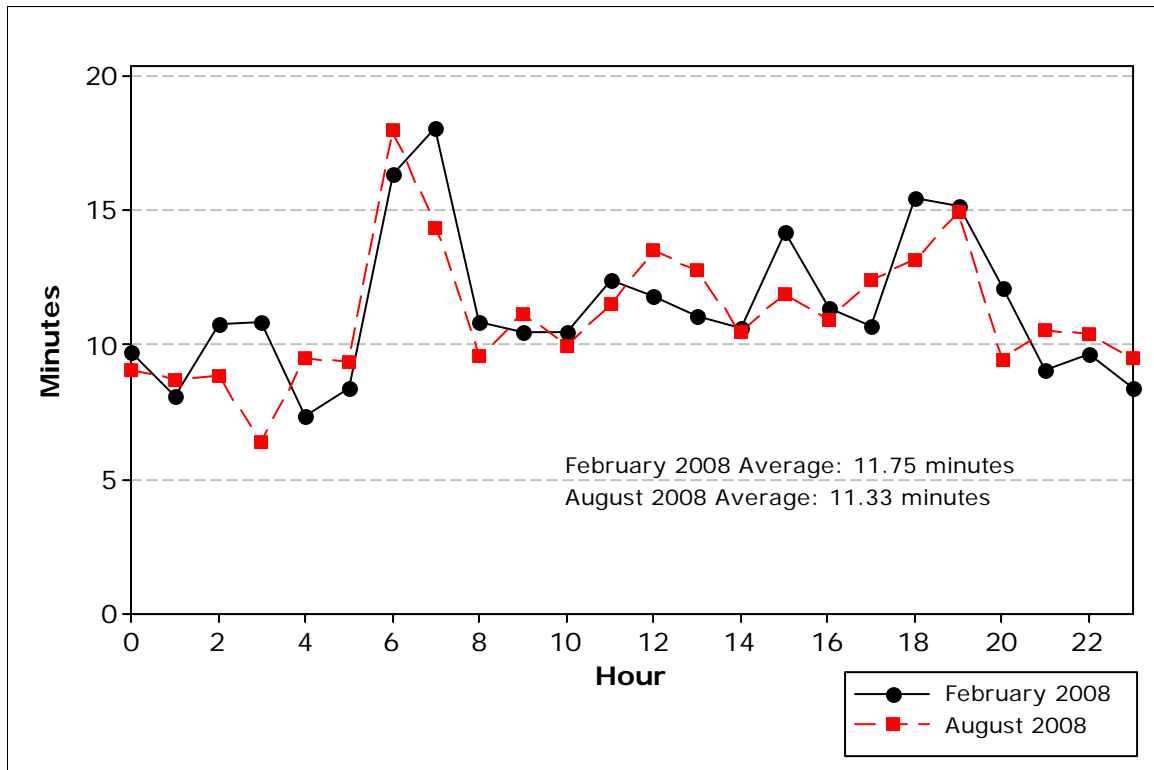
We analyzed the response times to various types of calls, separating the duration into dispatch and travel times. We begin the discussion with statistics that include all calls combined. Later, we report on the much lower response times for high-priority calls. We analyzed several types of calls to determine whether response times varied by call type. To better understand the response time issue, the study team calculated the cumulative distribution function (CDF) of response time for three types of calls. We calculated the dispatch delay, travel time, and the total response time.

Before presenting the specific figures and tables, we summarize all of the observations. We started with 4,358 and 6,127 calls for February 2008 and August 2008, respectively. We limited our analysis to calls that were other-initiated with nonzero on-scene times. We also encountered some calls without arrival times that we were forced to exclude from our analysis due to lack of information. This left 1,257 calls in February 2008 and 1,382 calls in August 2008.

Our initial analysis does not distinguish calls based upon their priority. It does examine the difference in response by time of day and compare summer and winter periods. After the overall statistics, we present an analysis based on the priority codes provided within the data. We focus on high-priority calls for the entire year. The response times for these are significantly shorter.

Response time is measured as the difference between when a call is received and when the first unit arrived on scene. This is separated into dispatch delay and travel time. Dispatch delay is the time from when a call is received until a unit is dispatched. Travel time is the time from when a unit is dispatched until a unit arrives.

**Figure 17. Average Response Time, by Hour of Day, for February and August 2008**



**Observations:**

- Average response times vary significantly by hour of day.
- The overall average is slightly shorter in August than in February.
- In February, the longest response times were between 7 AM and 8 AM, with an average of 18.1 minutes. These were primarily due to large dispatch delays and related to a patrol shift change.
- In February, the shortest response times were between 4 AM and 5 AM, with an average of 7.4 minutes.
- In August, the longest response times were between 6 AM and 7 AM, with an average of 18.0 minutes, with the same probable cause.

- In August, the shortest response times were between 3 AM and 4 AM, with an average of 6.4 minutes.

### ***Reading the Cumulative Distribution Function (CDF) Chart***

The vertical axis is the probability or percentage of calls. The horizontal axis is time of dispatch delay, travel time, or total response time. For example, approximately 80 percent of August's calls experienced a dispatch delay of 6 minutes or less. Dispatch delay is the amount of time that occurs between the time a call is received at the dispatch center to the time it is given to a unit. (The 80-percent line intersects the curve at the 6-minute mark.) When comparing different CDF lines, a higher graph represents a larger percentage of low values. Figure 19 shows that the travel times are a bit lower for August 2008 than for February 2008.

**Figure 18. Dispatch Delay Cumulative Distribution Function**

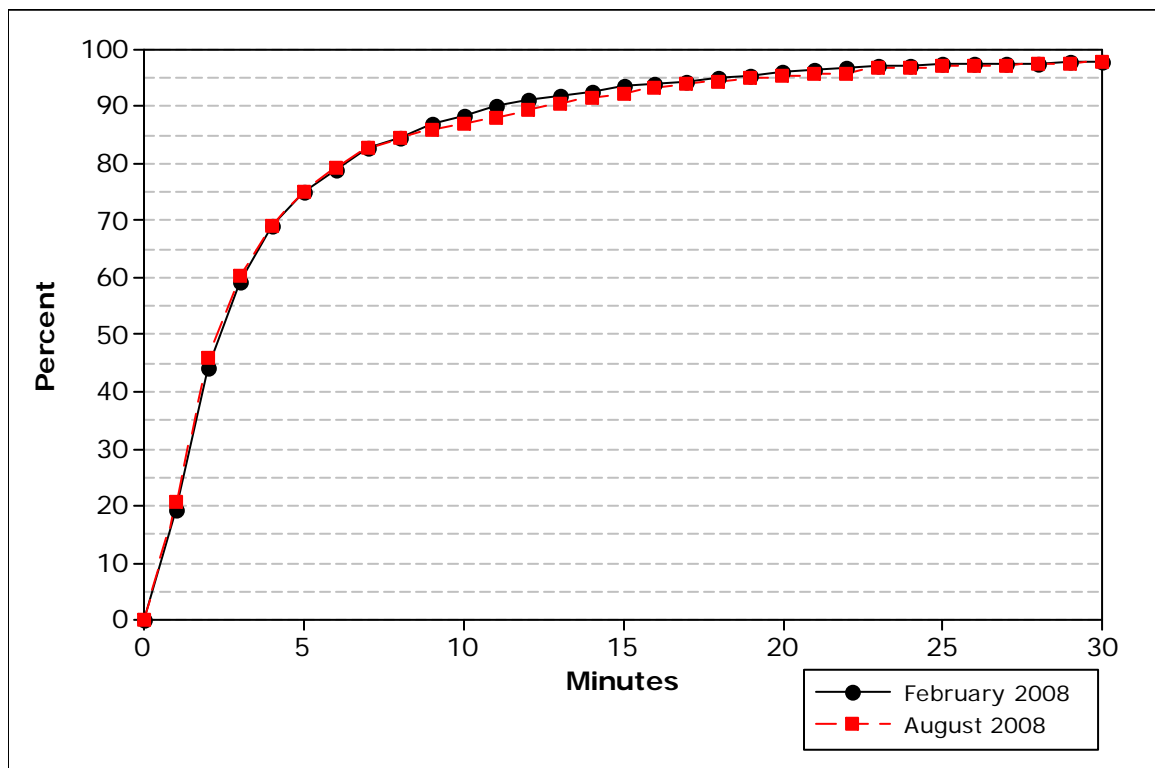


Figure 19. Travel Time Cumulative Distribution Function

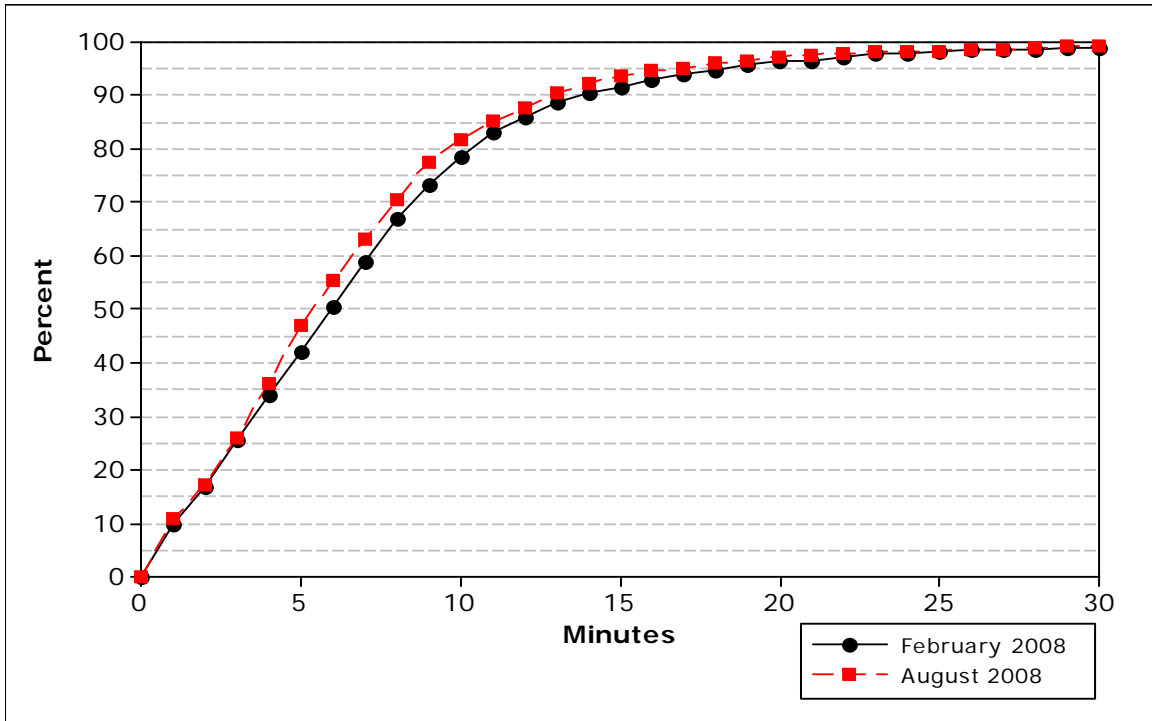
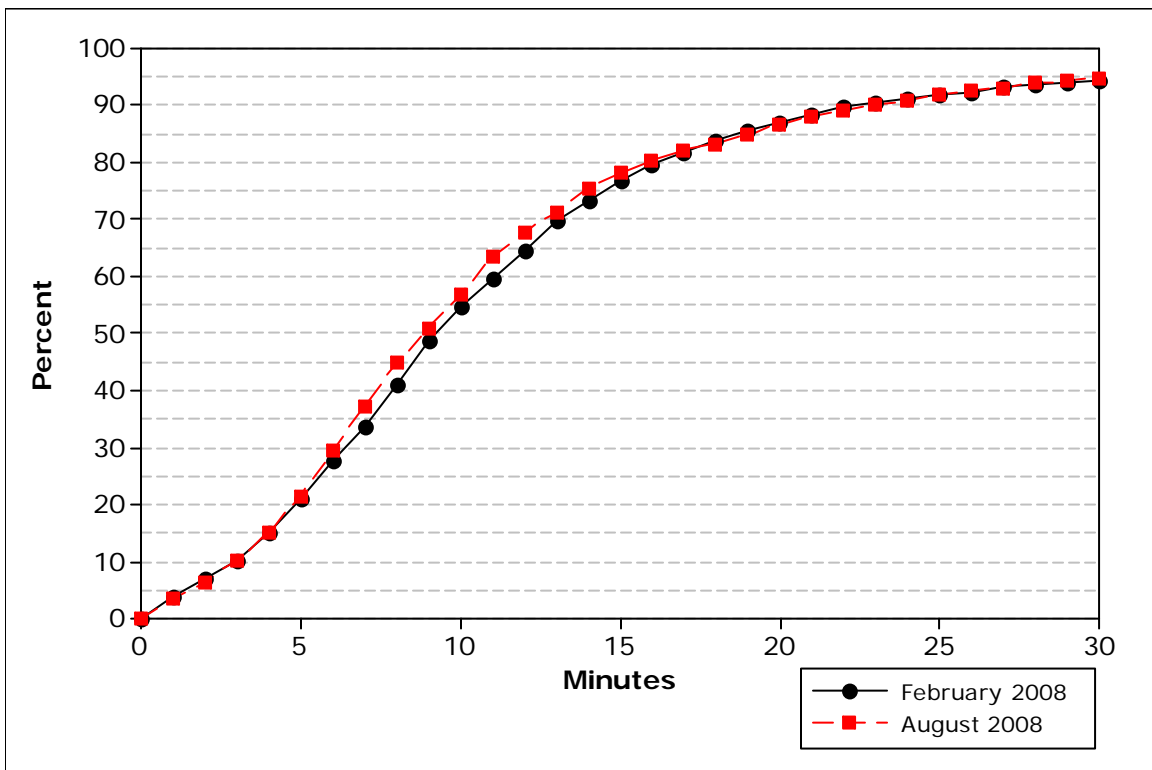
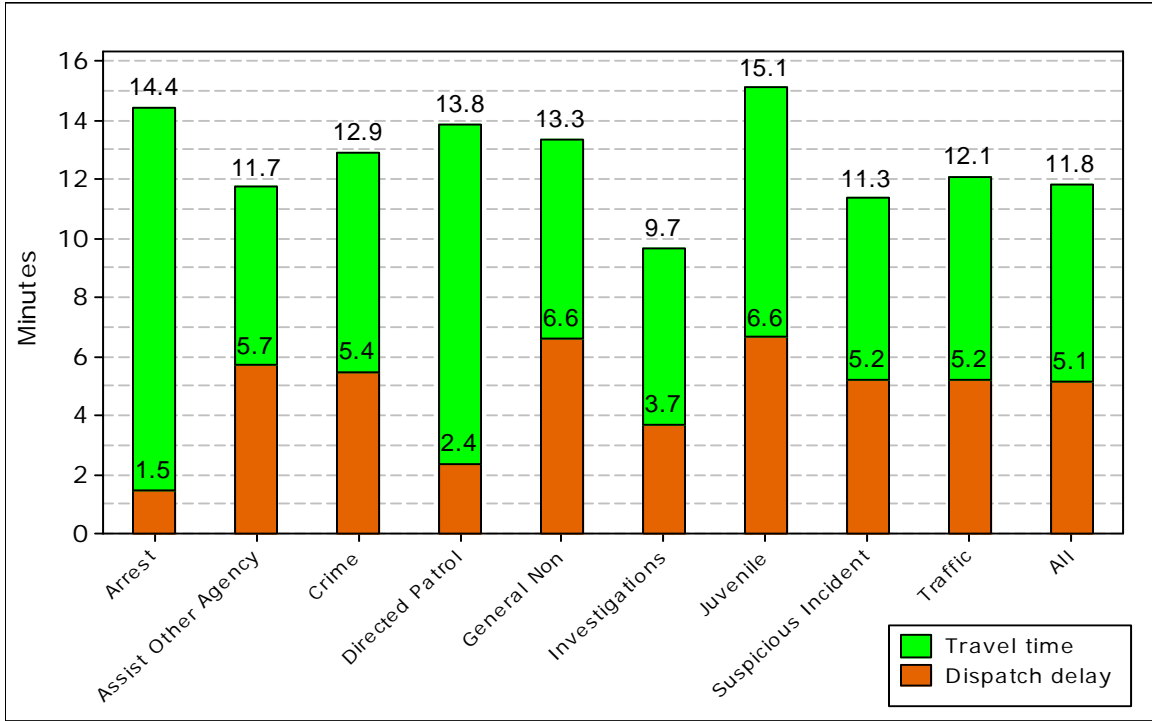


Figure 20. Response Time Cumulative Distribution Function

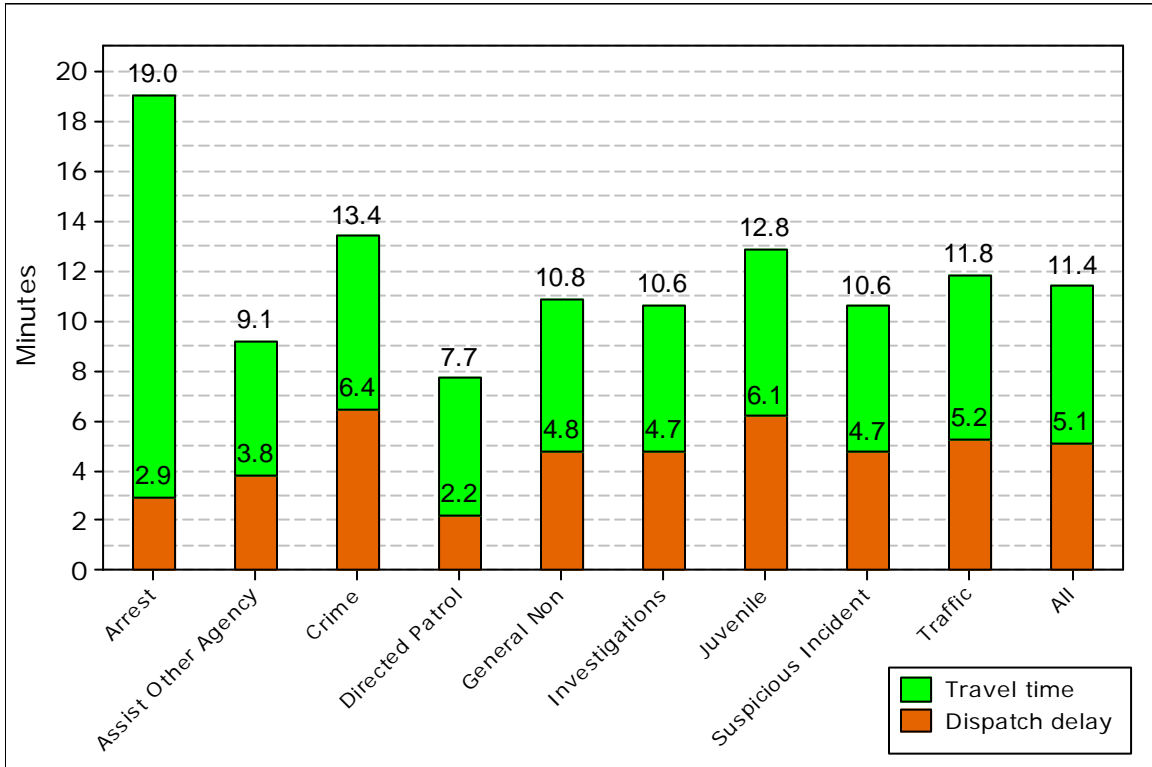




**Figure 21. Average Response Times in February 2008**



**Figure 22. Average Response Times in August 2008**



**Table 11. Average Response Time Components by Category**

Category	February 2008			August 2008		
	Dispatch	Travel	Response	Dispatch	Travel	Response
Arrest	1.5	12.9	14.4	2.9	16.1	19.0
Agency assist	5.7	6.0	11.7	3.8	5.4	9.1
Crime	5.4	7.4	12.9	6.4	7.0	13.3
Directed patrol	2.4	11.5	13.8	2.2	5.5	7.7
General	6.6	6.7	13.3	4.8	6.1	10.8
Investigations	3.7	6.0	9.7	4.7	5.9	10.6
Juvenile	6.6	8.4	15.1	6.1	6.7	12.8
Suspicious	5.2	6.1	11.3	4.7	5.8	10.5
Traffic	5.2	6.9	12.1	5.2	6.5	11.8
<b>Total</b>	<b>5.1</b>	<b>6.7</b>	<b>11.8</b>	<b>5.1</b>	<b>6.3</b>	<b>11.3</b>

**Table 12. 90th Percentiles for Components by Category**

Category	February 2008			August 2008		
	Dispatch	Travel	Response	Dispatch	Travel	Response
Arrest	10.2	60.0	60.0	22.4	60.0	60.0
Agency assist	16.5	11.1	26.5	7.4	11.1	16.9
Crime	11.5	14.5	22.2	17.1	13.8	26.7
Directed patrol	12.6	30.7	30.8	6.5	20.0	25.8
General	18.2	13.3	26.5	16.2	13.7	24.2
Investigations	7.9	11.4	17.1	12.7	11.8	22.3
Juvenile	20.6	18.4	31.2	19.4	12.0	29.2
Suspicious	10.8	11.6	21.3	11.7	10.6	19.7
Traffic	13.5	14.0	24.8	13.5	13.6	24.5
<b>Total</b>	<b>11.8</b>	<b>13.3</b>	<b>22.3</b>	<b>13.3</b>	<b>12.4</b>	<b>22.8</b>

## Observations:

- Response times varied significantly by call category.
- In August, average response times were as short as 8 minutes (for directed patrol) and as long as 19 minutes (for arrests).
- In February, average response times were as short as 10 minutes (for investigations) and as long as 15 minutes (for juvenile calls).
- Average response times for crimes were 13 minutes for both months.
- Average response times increased significantly (over 30 percent) from February 2008 to August 2008 only for arrests.
- Average response times decreased significantly (20 percent or more) from February 2008 to August 2008 for agency assists, directed patrols and general non-criminal calls
- In August, average dispatch delays varied between 2 minutes (for directed patrol) and 6 minutes (for juvenile and crime calls).

- In February, average dispatch delays varied between 2 minutes (for arrests and directed patrol) and 7 minutes (for general non-criminal and juvenile calls).
- In August, 90th percentile values for response times were as short as 17 minutes (for agency assists) and as long as over an hour (for arrests).
- In February, 90th percentile values for response times were as short as 17 minutes (for investigations) and as long as over an hour (for arrests).

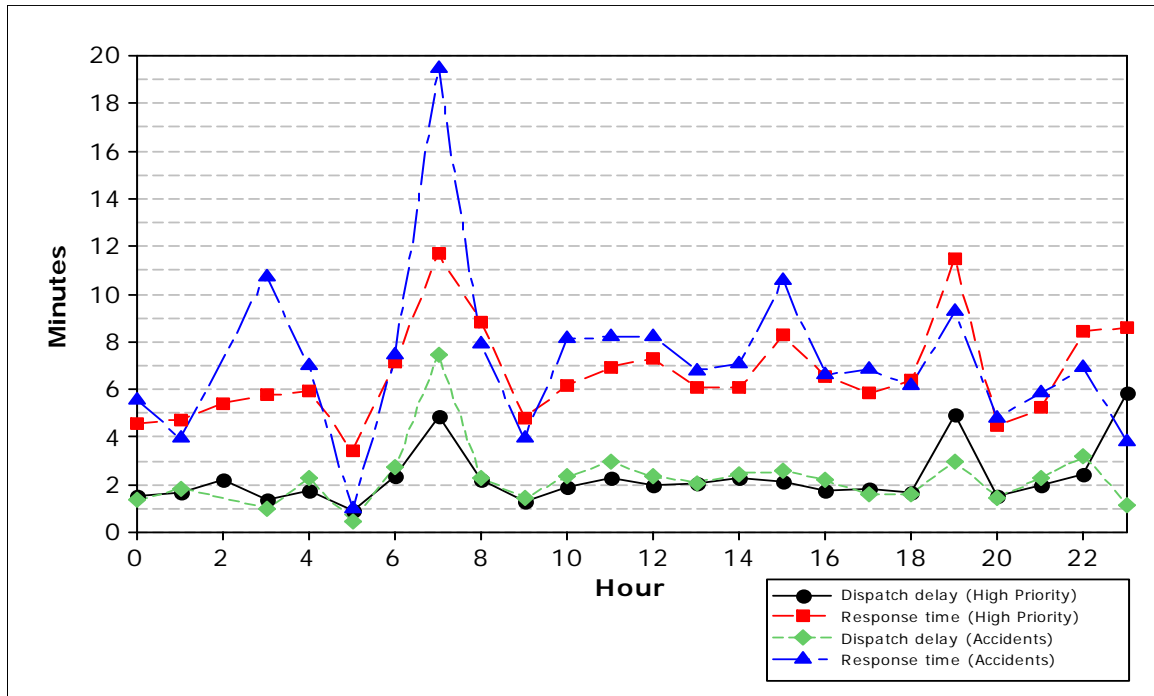
### ***High-Priority Calls***

A priority code from 0 through 9 was assigned to each call by the dispatch center. However, a discussion with the police department indicated that these codes were unreliable. Instead, we took another approach and asked the department to identify call descriptions that were likely to be assigned the highest priority. Table 13 shows average response times for these high priority calls. A separate category for accidents with injuries is also included. These averages included all nonzero on-scene other-initiated calls throughout 2008.

**Table 13. Average Dispatch, Travel, and Response Times, by Priority**

<b>Priority</b>	<b>Dispatch</b>	<b>Travel</b>	<b>Response</b>	<b>Total calls</b>
High	2.3	4.5	6.7	449
Accident with Injuries	2.2	4.9	7.2	168

**Figure 23. Average Response Times by Hour for High-Priority Calls**



Observations:

- High priority calls and accidents with injuries had much shorter response time of 6.7 and 7.2 minutes, respectively, in comparison with the overall yearly average of 12 minutes.
- Average response time for high priority calls varied by time of day, from 3.5 minutes between 5 AM and 6 AM to 11.7 minutes between 7 AM and 8 AM.
- Average response time for accidents also varied by time of day, from 1.0 minutes between 5 AM and 6 AM to 19.5 minutes between 7 AM and 8 AM.
- Hourly samples for high priority calls and accidents were quite small. There were only 3 accidents with injuries between 7 AM and 8 AM and none between 2 AM and 3 AM. These results should be used cautiously.

## **V. Comments, Observations, and Recommendations**

### **A. COMPSTAT**

COMPSTAT, an acronym for Computer Statistics or Comparative Statistics, is a management tool begun by the New York City Police Department. The department began conducting weekly Crime Control Strategy Meetings as a means to increase the flow of information between the agency's executives and the commanders of operational units, with particular emphasis on crime enforcement and quality of life issues. The COMPSTAT process is a strong and vigorous performance-management tool capable of assisting the department's middle and upper management in assessing the efficacy of crime control and problem-solving activities in the city.

COMPSTAT is implemented to monitor and combat crime with the realignment and deployment of personnel. Its use allows for a cross section of the department to provide input on issues and concerns surrounding the community. Additionally, it can help city and community leaders collaborate in developing new strategies. Other city department representatives (such as the department of public works, recreation, code enforcement, and fire inspection) can participate in COMPSTAT meetings to help develop interaction between all departments. This will support policing initiatives and strategies. An effective COMPSTAT process must include:

- Sharing of information on effective policing strategies among all of the NPD managers, including real time data collection on performance outcomes
- Dissemination of performance data to commanders on a regular basis
- Identification of priorities for each command assignment in the NPD
- Weekly review of key performance measures
- Development of problem- and crime solving strategies
- An active role for all of the police supervisors
- Variation of the meeting schedule from time to time to fit the various work shifts of the first-line supervisors, which encourages participation by all rank-and-file personnel;

We have found that other police departments that have implemented the COMPSTAT program have achieved success with its use.

***Recommendation***

NPD should explore the feasibility of implementing weekly COMPSTAT meetings, which should involve a cross section of the department's personnel. Police managers at all levels must be fully engaged in monitoring and evaluating subordinates' performance, training, and retraining, with appropriate rewards and discipline as needed, to improve effectiveness and safety.



## **B. Patrol**

*Temporary Anticrime Unit:* The ICMA team noted an increase in property crimes dealing with auto theft (plus 20.93 percent), burglary (plus 4.29 percent), and larceny (plus 23.63 percent). While we acknowledge NPD to be proactive in its customer service-oriented approach to the community, the department has to initiate an aggressive advance to curb these increases. The department should consider using existing personnel to creating a temporary *anticrime unit*, consisting of 3 police officers, to provide special and extra attention to crime-fighting strategies through directed patrols.

During the weekly COMPSTAT meetings, the police administration can target the specific areas of the community. The unit will be assigned to the patrol function, but report to the criminal investigation function for daily assignments. This anticrime project will require a cooperative effort on the part of both the patrol function and criminal investigation commanders, with approval and emphasis added by the chief of police. This unit will act as a proactive crime-fighting unit, working as dictated by when the crimes are occurring and the calls for service occur. Therefore, instead of simply reacting to criminal activity, the department will have a thoughtful plan, which can be developed by all members of the patrol and investigative operations.

### ***Recommendation***

We recommend that the city and police administrations implement a temporary anti-crime unit to target and combat the increase in property crimes.

*Response Time:* The ICMA team observed some of the response times for the patrol units to be excessive. Reviewing the data analysis in

Figure 23, Average Response Times by Hour for High Priority CFS, shows there were spikes from 6 AM to 8 AM, at 3 PM. and from 6 PM to 8 PM. It appears these spikes occur when the shifts are changing or when the afternoon units are placed in service.

***Recommendation***

The police administration should implement at least one early patrol function unit to rectify this situation. In addition, the police administration should establish a mandatory policy that would provide that whenever two patrol units are dispatched to a scene, the first-line supervisor must also be assigned to the scene to ensure proper staffing levels. This policy should have the impact of freeing up police units sooner than is now the case.

*Citation Activity-Nonperformance:* We observed some non-performance in the area of traffic enforcement prior to January 2009 when changes were made in the area of supervision. While quotas are illegal, the administration should initiate some strategies for improving citation activity for officers with a nonperformance issue.

The command staff must rely on first-line supervisors to address this issue, initiating a discussion with supervisors as to how to improve the situation. For example, a supervisor can submit a memorandum to the command staff as to how he is going to motivate an officer. This technique lets both the supervisor and the officer know there is a performance issue. It is also beneficial for the sergeant to be required to ride along during directed patrols to monitor subordinates' activities.

### ***Recommendation***

The police administration should take an assertive approach with officers who exhibit nonperformance. Management should also provide some additional training to the first-line supervisors to help them identify and correct these performance issues.

Management should also support supervisors who find it necessary to counsel or reprimand an officer for nonperformance. If management supports the supervisor, the chances of improving the officer's performance will increase substantially.

*Fire Department-Related Issues:* In a review of calls for service involving weather-related incidents such as storms, power outages, and high winds, we found that police department resources were stretched very thin during these events. It was related to the ICMA team that it is thought the fire department units should play more of an active role in assisting the police department during these events. For instance, even though the police department is still expected to respond to typical police-related calls (crimes, arrests, burglary alarms, and accidents) during these events, police are also expected to protect and cordon off natural disaster scenes.

### ***Recommendations***

The city, police, and fire administrations should develop a collective plan whereby fire personnel will be more proactive when incidents of natural disaster occur in the community.

*Towing:* The NPD towed approximately 700 vehicles in 2008, and expends a considerable amount of time on vehicles that are towed. Due to the administrative processes required to complete a tow, the city should explore the feasibility of a new ordinance whereby a \$20.00 administrative fee for a tow can be applied and collected for the City. The

fee could generate approximately \$14,000 in revenue annually to offset the administrative burden.

### **C. Civilianization**

The Novi Police Department, like most police departments, is confronting increasing demands for services with limited resources. One remedy for the dilemma is the greater use of civilian employees.

Civilianization enables more officers to answer the calls that require full police powers. During our interview process, the chief of police indicated that the police administration was considering the process of identifying positions civilian employees could fill.

To determine whether a position could be civilianized, the following questions must be asked:

- Does the position involve responding to police emergencies?
- Does the position require police officer status or arrest powers?

To ensure the success of the program, prudent personnel selection and effective training are essential. Hiring retired officers who have the job knowledge and respect of the current staff is one way to fill civilian positions. Police acceptance is critical to the success of the process. All levels of management must support civilianization.

The ICMA team has identified and is recommending that the city and police administration should explore and consider changing to civilian positions:

- Property and evidence management
- Traffic accident investigators
- Training officer.

### ***Recommendations***

We recommend that the NPD administration identify those sworn positions that can be appropriately staff by civilians, using a carefully thought-out process whose goals are cost-effectiveness and efficiency. The timetable to implement the recommended changes is the responsibility of the city. The city should fully staff the civilian structure while practicing fiscal restraint.

### **D. Technology/Records**

The patrol units have onboard computer laptops. However, with the current system that is used, when an officer completes a call and later re-opens the report on the laptop, the time for completing the report is not captured. As a result, the officer's time ends up being unaccounted towards the report s/he is working on. Fixes have been reviewed but unless a new number is assigned when the officer returns to the report, the time is not accounted for correctly. This can lead to incorrect data analysis and evaluation.

To boost the department's capacity to prevent and solve auto theft and other crimes, the police administration should investigate the use of License Plate Reader Technology (LPR). An LPR is utilized as both a crime detector and prevention device. The device scans the license plate of every vehicle that passes, and runs the plate numbers through state and federal criminal databases. When the machine gets a "hit," it

delivers instant notification. The devices can typically read hundreds of plates an hour.

The ICMA team observed the operations of the records unit. The civilian personnel were customer friendly and service oriented, and demonstrated professional and dedication in their duties. However, with the 21<sup>st</sup> century technology that is in use at the police department, we believe the unit could operate effectively with less than the current 7 full-time clerks.

***Recommendation***

The city and police administration should explore the feasibility of upgrading its software program so officers will be able to reopen a CFS while on unobligated patrol. This will ensure that the officers and the department are getting the proper credit for consumed time on each CFS.

In addition, the city and police administration should explore the use of a larger server for the computer and laptop system. The server needs greater capacity to deliver the department's standard operating procedures and the policies online. When officers arrive on the scene, they will have appropriate documents and information available to them. This will also allow the department to update policies and procedures with computer time stamps for record keeping and training purposes. In addition, the city and police administrations should also explore purchasing LPR technology to enhance crime-fighting capabilities.

The city and police administration should reduce the number of clerks in the record unit by one, unless the duties of property and evidence management are reassigned to this unit in a civilian position. In addition, the records duties in the fire department should be relocated to police headquarters, thus eliminating the clerk position in the fire department. This will alleviate redundant reporting, and will create a shared service where all police and fire reports will be available at one location.

### **E. Communications**

The basic function of the communication system is to satisfy the immediate information needs of the NPD both in the course of normal daily activities and during emergencies. Communications personnel use the system to convey information from the public to the NPD, to the officer who responds to the call for assistance, to other law enforcement and public service agencies, and to information-storage facilities and retrieval systems.

Most routine communications and all emergency communications are routed through the communications center. There are three interrelated means of communication in place: telephone, radio, and computer. All incoming communications demand immediate attention, forcing a dispatcher to choose one call over the other. The communications center console positions are capable of both receiving telephone calls and dispatching service calls.

#### ***Recommendations***

We recommend the city explore the feasibility of updating its Computer Aided Dispatch/Records Management System to ensure

capture and generation of accurate and understandable data on all aspects of the records management and dispatch functions.

## **F. The Commission on Accreditation for Law Enforcement Agencies (CALEA)**

The Commission on Accreditation for Law Enforcement Agencies (CALEA) is a nationally recognized program that promotes professional police excellence. The program is a progressive and proven method law enforcement agencies use to calculate and improve their overall performances.

The program is made up of standards that contain a clear statement of professional objectives. Agencies that participate conduct a thorough self-analysis to determine how existing operations can be modified to meet the objectives. The CALEA program acknowledges the implementation of policies and procedures that are conceptually sound and operationally effective. A department is able to raise its performance through the CALEA accreditation process..

Accreditation can demonstrate to the department and residents that the NPD is an effective and professional law enforcement agency.

The Commission recognizes that the process to gain accreditation is arduous and takes time. By undertaking and succeeding in the accreditation process, the department can demonstrate its ability to carry out all aspects of its mission effectively and efficiently.



The CALEA program:

- Increases an agency's ability to prevent and control crime through more effective and efficient delivery of law enforcement services to the community it serves
- Establishes standards that address and help reduce liability for the agency members
- Provides the agency with recognition of excellence, accountability, and an opportunity to receive insurance premium discounts in relation to such an achievement
- Establishes standards that make an agency and its personnel accountable to the constituency they serve
- Implements standards that do not conflict with national standards;

### ***Recommendations***

The Novi Department should embark on the CALEA certification process. While it is time-consuming and requires a significant effort, the department will be well served by undertaking and completing the program. The first step in the process is to update and ensure that all department general orders and standard operating procedures meet the criteria outlined in the CALEA program.

### **G. Fleet Issues and Concerns**

Every year the Michigan State Police conduct evaluations on three leading first-line patrol units: Chevrolet Impala, Dodge Charger, and Ford Crown Victoria. The agency's testing results are considered benchmarks by municipalities across the country. The evaluations are nationally recognized as the accepted law enforcement standards and testing program.

Most of NPD's patrol vehicles are Ford Crown Victoria Police Interceptors (CVPI), equipped with 8-cylinder motors. Consideration should be given to purchasing 6-cylinder "police package" Chevrolet Impalas, which have lower initial purchase costs, better gasoline mileage, and a superior drive train warranty compared to the Crown Victoria. We note that the terms of the drive-train warranty (Chevrolet, 5 years/100,000 miles; Ford, 5 years/60,000 miles; Dodge, 3 years/36,000 miles) and combined city-highway gas mileage (Chevrolet 21 mpg, Ford 16 mpg, Dodge [6 cylinder] 20 mpg) offer potential savings in total cost of a vehicle.

*Note:* Both the Los Angeles County Sheriff and the Michigan State Police 2008 model year police vehicle tests illustrated a 4.0-MPG advantage for the Chevrolet over the Ford. Two major cities, New York and Philadelphia, utilize the Chevrolet Impala as first-line patrol vehicles

The optimum time to replace a police car is when total costs, including purchase price, averaged over the car's lifetime, are at a minimum. City and NPD administrations should base fleet replacement/rotation criteria on life-cycle cost data, including acquisition cost and residual value when the car is taken out of service. The service life for patrol cars should be 125,000 miles before replacement; Novi currently replaces patrol vehicles at 80,000 miles.

The ICMA team observed the maintenance operation for the police vehicles. Given the city's overall vehicle maintenance capabilities, we see no reason why the two mechanics now working on police vehicles should

be located at police facilities. These operations could be consolidated with the City's other (DPS, etc.) fleet operations at another location.

### ***Recommendations***

We recommend that the city and police administrations explore the feasibility that police vehicle purchases should have specifications for fuel economy as well as standard warranty comparisons.

The city and police administration should also consider transferring the two police fleet mechanics to multitasking duties at the department of public services.

## **H. Proposed Table of Organization**

### *Deputy Chief's Position*

If the intent is to identify a person in charge whenever the chief of police is not available, the use of the deputy chief title is an acceptable way to achieve the goal. A deputy chief of police shall be the second in command of the police department and shall have authority commensurate to the chief of police, but with final disposition made by the chief of police. A deputy chief of police

- Assumes all authority of the chief, when, for any reason, the chief is absent from duty
- Coordinates the operations of all divisions, bureaus and personnel therein
- Develops and guides all long- and short-term planning within the department

- Reviews all disciplinary proceedings against any member of the department before final disposition by the chief of police
- Is receptive to all community relations programs and develops community spirit together with police functions
- Controls and maintains personnel files.

As now structured, the department manages with four sworn senior persons: the chief, deputy chief, and two lieutenants and two civilian managers: records and communications. Uniform sergeants act as the first line of supervision but do not take part in strategic planning and decision making.

The department should be re-structured into two divisions as follows and as illustrated in Exhibit A: Operations (All field activities – patrol, investigations, etc.) and Support (all non field functions).

Duties are not well defined with the present rank structure. It is clear that many of these senior management responsibilities fall to the lieutenants. We believe that this is an unacceptable structure for management of the department. We recommend the city establish one additional deputy chief position. One deputy chief should be given charge of the operations (line) function, and the other should be given charge of the administrative/support function.

### ***Recommendations***

We recommend a restructuring of the department and the creation of a second deputy chief position. The present duties of operations and administration can be then be redirected to the two deputy chief

positions. There is no need for four senior management positions in the department. This change will also not require additional personnel.

Presently the chief of police and the deputy chief are *at will* (non-union) employees. The additional deputy chief will also be an *at will* (non-union) position.

The concept will follow the Fair Labor Standards Act (FLSA) section regarding police executives. The 3 positions; the deputy chiefs and chief of police, should be considered managerial executives and excluded from the bargaining unit (as is currently the case) applying the following definition:

*A person formulates policies when he develops a particular set of objectives designed to further the mission of a segment of the governmental unit and when he selects a course of action from among available alternatives. A person directs the effectuation of policy when he is charged with developing the methods, means, and extent of reaching a policy objective and thus oversees or coordinates policy implementation by line supervisors. Whether or not an employee possesses this level of authority may generally be determined by focusing on the interplay of three factors:*

*(1) The relative position of that employee in his employer's hierarchy;*

*(2) his/her functions and responsibilities; and*

*(3) The extent of discretion he exercises.*

We note that given the current staffing and deployment levels it would not be necessary to add additional personnel to accomplish this restructuring. The second deputy chief's position should be filled with existing personnel.

## Exhibit A. Proposed Table of Organization, Novi Police Department

