

**North Castle, NY, Police Department
Operations and Data Analysis Report
June 30, 2011**



POLICE OPERATIONS

POLICE OPERATIONS

C E N T E R F O R P U B L I C S A F E T Y M A N A G E M E N T

**Submitted by and reply to:
ICMA Center for Public Safety Management
International City/County Management Association
777 North Capitol Street NE, Suite 500
Washington, DC 20002
PublicSafety@icma.org
202-962-3607
Copyright © 2011**



Leaders at the Core of Better Communities

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 Center for Public Safety Management

ICMA's Center for Public Safety Management approaches projects using a combination of full-time ICMA staff and subject matter experts who are renowned in the field of public safety. Subject matter experts are assigned to a project based on their expertise, so they are able to provide analysis and recommendations tailored to client concerns.

The Center for Public Safety Management focuses on police, fire, EMS, and Homeland Security issues in five key areas: Technical Assistance, Research, Education and Training, Chief Selection, and Publications.

ICMA Project Contributors

Leonard A. Matarese, MPA, Director, Research & Project Development

Paul E. O'Connell, Ph.D., JD, Senior Public Safety Consultant

Dov N. Chelst, Ph.D., Director of Quantitative Analysis

Sarita Vasudevan, M.S., Consulting Quantitative Analyst

Priscila Monachesi, M.S., Consulting Quantitative Analyst

Kebebush Welkema, M.S., Consulting Quantitative Analyst

Table of Contents

I. Executive Summary	7
II. Introduction	10
III. Operations Analysis	11
A. Physical Plant and Resources	11
B. Administrative Structure	12
C. IT Infrastructure and Dispatch Operations.....	15
D. Training.....	20
E. Strategic Planning and Performance Measurement	24
F. Patrol Operations and Staffing Analysis	36
G. Miscellaneous.....	43
H. Options for Maximizing Department Efficiency	44
I. Conclusions	49
IV. Data Analysis	51
A. Introduction	51
B. Workload Analysis.....	52
C. Deployment	77
D. Response Times	90

Tables

Table 1. Events per Day, by Initiator.....	56
Table 2. Events per Day, by Category	58
Table 3. Calls per Day, by Category	60
Table 4. Calls per Day, by Initiator and Months	61
Table 5. Calls per Day, by Category and Months	64
Table 6. Primary Unit's Average Occupied Times, by Category and Initiator	66
Table 7. Number of Responding Units, by Initiator and Category	69
Table 8. Number of Responding Units, by Category, Other-initiated Calls...	71
Table 9. Calls and Work Hours per Day, by Category, February 2010	73
Table 10. Calls and Work Hours per Day, by Category, August 2010	75
Table 11. Average Response Time Components, by Category	93
Table 12. 90th Percentiles for Components, by Category	94

Figures

Figure 1. Percentage Events per Day, by Initiator	56
Figure 2. Percentage Events per Day, by Category.....	57
Figure 3. Percentage Calls per Day, by Category	59
Figure 4. Calls per Day, by Initiator and Months	61
Figure 5. Calls per Day, by Category and Months.....	63
Figure 6. Average Occupied Times, by Category and Initiator.....	65
Figure 7. Number of Responding Units, by Initiator and Category	68
Figure 8. Number of Responding Units, by Category.....	70
Figure 9. Percentage Calls and Work Hours, by Category, February 2010 ..	73
Figure 10. Percentage Calls and Work Hours, by Category, August 2010 ...	75
Figure 11. Deployed Officers, Weekdays, February 2010	78
Figure 12. Deployed Officers, Weekends, February 2010	78
Figure 13. Deployed Officers, Weekdays, August 2010	79
Figure 14. Deployed Officers, Weekends, August 2010	79
Figure 15. Deployment and Other-Initiated Workload, Weekdays, February 2010.....	81
Figure 16. Deployment and Other-Initiated Workload, Weekends, February 2010.....	81
Figure 17. Deployment and Other-Initiated Workload, Weekdays, August 2010.....	82
Figure 18. Deployment and Other-Initiated Workload, Weekends, August 2010.....	82
Figure 19. Deployment and Main Workload, Weekdays, February 2010.....	84
Figure 20. Deployment and Main Workload, Weekends, February 2010	84
Figure 21. Deployment and Main Workload, Weekdays, August 2010	85
Figure 22. Deployment and Main Workload, Weekends, August 2010	85
Figure 23. Deployment and All Workload, Weekdays, February 2010.....	87
Figure 24. Deployment and All Workload, Weekends, February 2010.....	87

Figure 25. Deployment and All Workload, Weekdays, August 201088
Figure 26. Deployment and All Workload, Weekends, August 201088
Figure 27. Average Response Time, by Hour of Day, for February 2010 and
August 201091
Figure 28. Average Response Times, February 201092
Figure 29. Average Response Times, August 201092

I. Executive Summary

ICMA was engaged to perform an analysis and evaluation of the North Castle, New York Police Department (hereinafter, "the department"), including its organizational structure, management processes, policies, staffing, and operations. Specifically, ICMA was asked to review the current operations, policies, and practices of the department; analyze those operations, policies, and practices in light of current standards and practices of police organizations of similar size; identify major areas where the operations, policies, and practices of the department appear to deviate from standard practice; and broadly recommend corrective actions that can be taken to address any deficiencies.

ICMA was also charged with obtaining and analyzing performance information contained in the department's computer aided dispatch (CAD) system. The purpose of this analysis was to identify and compare staffing levels to workload over an extended period of time. The resulting data is instructive in terms of examining necessary staffing levels going forward.

ICMA was provided full access to personnel, data, records, and facilities necessary to the preparation of this report. All material contained in this report is based upon the documents provided to ICMA and statements made by department personnel during our site visits.

ICMA's review entailed personal interviews with employees of each rank, and examination and analysis of the department's current rules and regulations, collective bargaining agreement, information systems, and other records and data. This report contains factual assertions and findings about the department's current operations and capabilities that are based upon field observations, as well as the representations of department personnel.

It should be noted that ICMA was not engaged to evaluate department personnel. Police personnel were observed and interviewed only insofar as the information obtained could lead to an understanding of department operations.

ICMA staff wish to thank the town and police administrations of North Castle for their assistance in completing this project. In particular, ICMA commends Town Supervisor William Weaver and Chief D'Angelo for their enthusiasm and cooperation with ICMA staff regarding document requests, access to personnel, and the overall project.

Based upon ICMA's observations and analysis of the department, we have identified a number of items and issues that can lead to greater operational efficiency and effectiveness. ICMA's primary findings and recommendations include the following:

- ICMA believes that scheduling two police officers and one sergeant is sufficient to address patrol obligations in North Castle during most shifts.
- ICMA believes that a department of this size does not require three senior police officials at the rank of lieutenant.
- The department should commence as soon as possible a program of developing and disseminating comprehensive *annual reports*.
- The department needs to develop and clearly communicate a coherent strategic plan. The "annual goals" currently utilized by the department are insufficient for this purpose. Each year, the department should develop specific performance goals, then actively measure its performance throughout the year to determine its ability to meet these goals.
- The department should hold regularly scheduled (at least monthly) *command staff meetings* for all supervisory staff.

- Both the quantity and quality of communications between the department and town officials need to be improved. The department should utilize a standard template to convey pertinent performance information to town officials. This could include timely and accurate budgetary and administrative information, such as sick time, comp time, and overtime expenditures, as well as any enforcement information or other measures that the chief and town officials agree to include.
- The department should immediately convene an internal *technology task force*. This body should be made up of supervisors, line officers, and civilian members of the department. It should meet on a regular schedule, and should: 1) identify the department's current technology needs; 2) identify any current deficiencies of the department's current communications (i.e., CAD) and records management system (RMS); 3) revise and update the department's website; and 4) make specific recommendations for improvement, where necessary.
- The department must identify those categories of calls for service that *do not require an immediate police response* and make a coordinated effort to inform the public about nonemergency matters that can be handled in-person (at headquarters at a subsequent time) or via e-mail or U.S. mail.
- The department should consider hiring and training civilian personnel as dispatchers. This would alleviate the need to assign a uniformed police officer to this task each shift, thereby supplementing available patrol manpower.
- The department should consider broadening the scope of duties and responsibilities of its patrol personnel.

II. Introduction

Policing entails a complex set of activities. Police officers are not simply crime fighters, whose responsibilities are to protect citizens' safety and property and to enhance the public's sense of security. The police have myriad other basic responsibilities on a daily basis, including preserving order in the community, ensuring the free flow of vehicular and pedestrian traffic, protecting and extending the rights of persons to speak and assemble freely, and providing assistance for those who cannot assist themselves.

The North Castle Police Department provides a full range of police services – responding to emergencies and calls for service, performing directed activities and proactive patrol, community policing, and problem solving.

The Town of North Castle has a population of approximately 14,000 and encompasses an area of approximately twenty-six square miles. Its boundaries encompass the hamlets of North White Plains, Armonk, and Banksville. North Castle is a diverse community in terms of demographics and geography. Indeed, the map of North Castle appears at first glance to resemble a gerrymandered voting district. The furthestmost locations in the town are approximately sixteen miles apart, but there are no major roadways serving as a direct route from one end to the other. As a result, emergency response times can be affected.

North Castle contains some "high profile" locations (and potential terrorism targets), such as IBM Corp. headquarters and Kensico Dam.

The department received accreditation from the New York State Municipal Police Training Council in December 2000. The department was reassessed and recertified in 2005 and 2010.

III. Operations Analysis

A. Physical Plant and Resources

Police headquarters is located at town hall, which was built in 1948. The facility was renovated in 1987 and has since been expanded to include an administrative wing that provides additional space for administration, detectives, and patrol supervisors. The building is a well-designed, clean, and modern facility that affords the department sufficient physical space to conduct its current operations. The headquarters includes a detention facility.

Patrol officers and their vehicles appear well equipped. At the time of the ICMA site visit, the department had twenty-one vehicles. Several of these were obtained via asset forfeiture/seizure, so they are not suitable for patrol operations. The department expects to receive two new patrol vehicles in the near future, but will be “retiring” several vehicles. Thus, the fleet will drop to eighteen vehicles but there will still be sufficient patrol vehicle vehicles available for normal patrol operations.

Patrol vehicles are equipped with computer terminals, as well as video cameras used to record field sobriety tests and certain domestic violence investigations.

ICMA was unable to identify a clear department policy for the replacement of patrol vehicles.

Recommendation:

- The department should communicate its *fleet maintenance program* to all uniformed members of the department and to town officials. Such a policy should include a detailed description of all vehicles owned by the department; their use; their current mileage; repair records and

regular preventive maintenance schedules; total annual number of shifts or days of usage for each vehicle; and projected date or mileage at which each vehicle is to be retired from the fleet or transferred to another assignment.

B. Administrative Structure

The organizational chart for the North Castle Police Department shows the following personnel and hierarchy:

- 1 – Chief
- 3 - Lieutenants
- 6 – Sergeants
- 1 – Detective Sergeant
- 3 – Detectives (one of whom is assigned permanently assigned as youth/school resource/DARE officer)
- 16 – Police Officers (one of whom is assigned permanently to an emergency management role).

There are thirty uniformed members of the department. Approximately half of the department's uniformed personnel have twenty or more years of service. This is a disproportionately high percentage of personnel with such long tenure. Indeed, during the course of our study, four uniformed members of the department filed for retirement.

The department also employs several civilian personnel.

The duties and responsibilities of the chief, as outlined in the *North Castle Police Department Manual*, include the broad mandate to “develop plans to meet Police Department needs.” Despite this broad mandate, a great deal of administrative duties and responsibilities are assigned to the lieutenants.

The department's three lieutenants have the following titles: Lieutenant-Executive Officer, Lieutenant-Patrol Division Commander, and Administrative Lieutenant. Their duties and responsibilities are described in section 102-4 of the *North Castle Police Department Manual*.

Uniformed personnel are assigned to the following duties:

- Traffic Officer
- Training Officer (as well as several certified General Topics Instructors)
- Domestic Violence Officer (position currently vacant)
- Crime Analysis Officer
- Public Information Officer
- Homeland Security liaison
- Crime Prevention Officer
- A Detective is assigned as Youth/School Resource/DARE Officer.

At the time of ICMA's site visits, we were informed that the department does not have a designated Community Affairs Officer, Crimes Against the Elderly Officer, Gang Officer, or Chief Information Officer. Interestingly, citizens, town officials, and department personnel advised ICMA that this is "a community service-oriented department." In other words, as the community does not experience a great deal of crime, its officers act as first responders for medical/aided calls, and spend a considerable amount of time and energy in response to nonemergency calls for service. As one informant stated, "This department sends a cop on every call!" It is therefore somewhat ironic that the department does not have a formal community policing program, as it is expending a great deal of energy in performing classic community policing activities.

The department utilizes a properly formatted and indexed manual of rules and regulations that appears comprehensive and consistent with those of similar police agencies. It is reviewed and revised on an annual basis.

The *North Castle Police Department Manual* is supplemented by *General Orders* and *Operations Orders*, which are promulgated as necessary.

The department does not employ “special” police officers.

The department has not experienced many police union grievances in recent years.

The department has a designated Internal Affairs Officer. This position is currently being filled by the department’s detective sergeant. Interestingly, this individual is also serving as a police union official. The ICMA consulting team views this as somewhat unusual.

Supervisors within the department advised ICMA that the department’s annual budget has been “relatively flat” and has “not been going up dramatically” in recent years. They identified the total department budget to be \$6.9 million; “\$6.4 million in hard costs, with about \$470K in discretionary funds.”

Recommendations:

- ICMA believes that a department of this size does not require three personnel assigned at the rank of lieutenant. The department should consider eliminating a lieutenant’s position through attrition. It is assumed that a great deal of administrative work is performed by the chief. Therefore, one well-trained and well-supported Administrative Lieutenant and one Patrol Supervisor/Special Operations Lieutenant should be sufficient for the department.
- The department should consider hiring one or more “special” officers to perform those tasks that do not require a uniformed police officer.
- The department should reassign the role/position of internal affairs officer to a supervisory member of the department who is not serving

as a police union official. The current situation suggests a potential conflict of interest.

- The department should designate a ranking member of the force to serve as community affairs officer. This individual should be accountable for developing, implementing, and coordinating all community policing activities. This individual would also coordinate the new community outreach program designed to inform the public about the department's new reporting policies and procedures. (See *Recommendations* following the "Strategic Planning and Performance Measurement" section.)

C. IT Infrastructure and Dispatch Operations

ICMA did not perform a comprehensive IT inventory, as it was beyond the scope of this study. Nevertheless, ICMA was able to determine that the department utilizes a comprehensive, records-based software system. The system, which integrates CAD (computer aided dispatch) and RMS (records management system), was supplied by Total Enforcement (TE) and became operational during 2009. The prior RMS, Police Pro, is still operable and available to members of the service. This is necessary because the two systems have not been merged and investigators have to access the old system to review older case files. The TE system apparently includes additional functions that are not in use by the department.

The department has experienced a number of significant problems with the TE system. Computer terminals were placed in patrol cars and patrol officers and supervisors were expected to have the ability to freely enter and retrieve information from the system at any location within the jurisdiction. However, this has not been the case. TE apparently operates via cellular

frequencies, and there are locations within the jurisdiction that receive poor cellular phone reception or none at all.

ICMA learned that the system has “gone down” on numerous occasions. We were advised that officers entering data from one terminal can “time out” or “lock out” other personnel from accessing the same data. Officers entering an event narrative “can clog the entire system.” Narratives must be entered separately and multiple times on event reports, case reports, and arrest reports. Such situations happen frequently and it appears that the average time to perform certain routine tasks (such as processing an arrest or the vouchering and release of property) have increased considerably.

The department has not documented the total number of times when the system has gone down, or when officers have been timed out or locked out. Since the implementation of the TE system, the department has not studied whether the average amount of time for processing routine arrests has risen.

Additionally, the department struggled to establish proper access codes for the system. That is, the vendor did not set predetermined access codes for personnel in various roles performing various tasks. This has resulted in many instances in which the people who required access or the ability to enter necessary information were prevented from doing so by the system. Without an internal, fully designated IT support capacity, the department has experienced continued frustrations. ICMA was informed on several occasions that the current RMS system “is more difficult to use than the last system.”

A new version of TE – TE2 – has been purchased and is expected to go on line shortly.

The system can be used to plot summons and/or arrest activity on electronic maps. Also, the system enables the administrative lieutenant to track and analyze arrest activity, sick leave, and the like, as well as review individual event and case reports. TE2 or some other reliable program must be used to track overtime rates on an on-going basis.

Patrol officers have access to department-issued Nextel phones.

The department's website is quite limited and of little use to the public. It does link to traffic and utility alerts, but does not offer commonly used forms for citizens to download and complete prior to contacting the police.

There is no designated chief information officer (CIO) for the department, but the department has indicated its willingness to make such an appointment.

The department has not designated any member of the service to formally serve as crime analysis officer, although the detective sergeant does perform a number of related duties.

Shift activity is recorded via the CAD system and in supervisors' memo books. While the CAD system captures all calls for service, supervisors only make entries in memo books for "notable issues." The handling of a routine alarm may or may not be recorded by the supervisor.

The records management system contains electronic copies of complaint reports, accident reports, and the like.

The dispatcher station located at headquarters has five conventional telephone lines and three 911 lines. All 911 calls made in North Castle are received here; fire and medical calls are forwarded as necessary. Police are dispatched to all emergencies; therefore North Castle police officers are typically the first to arrive at the scene of a fire or medical emergency.

The roles of dispatcher and desk officer are combined. The desk officer/dispatcher is charged with monitoring headquarters' security cameras, performing "prisoner checks" when suspects are held in the detention facility, and handling "walk-in" requests for service.

Dispatchers also monitor state and county police radio transmissions, as well as calls originating from fire and ambulance services in the hamlets. A "hotline" is available at the desk to immediately communicate with all Westchester County police agencies in the event of an emergency, such as a high-speed police pursuit.

Recommendations:

- The department should establish an internal *technology task force*. This body should be comprised of supervisors, line officers, and civilian members of the department, should meet regularly, and should: 1) identify the department's current technology needs; 2) identify any deficiencies in the department's current communications (CAD) and records management systems; 3) revise and update the department's website; 4) identify technology training needs and recommend additional training; and 5) make specific recommendations for improvement, where necessary. This task force would report directly to the chief.
- The technology task force should be charged with documenting and studying: 1) the number and types of times when the RMS system goes down, times out, or locks out; and 2) the average amount of administrative time personnel use to enter and retrieve data while performing certain routine tasks, such as the processing of arrests or the receipt/return of lost property.
- The technology task force should be charged with assessing and evaluating the capabilities of TE2 once it is brought online.

- The department should identify additional functions of the RMS that could improve the department's overall record keeping and analytical capabilities and then provide additional vendor training to supervisory personnel.
- The department should designate one ranking officer to serve as chief information officer (CIO). This individual would be responsible primarily for creating, maintaining, and retrieving data from the police department's various databases, files, and records. The CIO would serve as chair of the technology task force. ICMA was advised that a lieutenant will be assigned to this position in the near future.
- The department's internal affairs officer should proactively track incidents and issues that may be related to police misconduct, such as: number/type of incidents involving use of force; weapons discharge; use of force; vehicle accidents (both department and personal autos); sick time; arrest and summons activity (particularly charges relating to disorderly conduct and resisting/obstructing arrest); and civilian and internal complaints. The internal affairs officer should monitor these issues continuously and provide to the chief an annual report of findings to be incorporated into the department's annual report.
- The key to integrity management is to develop a proactive strategy and capability to identify and address misconduct before it develops into a critical or systemic problem. To that end, the department should develop, follow, and document a program of systematic and random audits and inspections of critical operations (calls for service response and dispositions, property receipt and safeguarding, line of duty and sick leave, etc.) One ranking officer (a lieutenant) should be designated to plan, conduct, and report regularly the results of such audits and inspections.

D. Training

The executive officer (lieutenant) is designated as the department's training officer. He is responsible for coordinating and scheduling all training. As per accreditation guidelines, all uniformed members of the department receive at least twenty-one hours of mandated training annually.

Approximately eight members of the department are certified as general topics training instructors. Several members are certified firearms instructors. Over the years, members of the department have been detailed to teach at the Westchester County Police Academy.

Specialized training records and certifications of all personnel are properly maintained. Members of the department are scheduled for and receive all necessary tactical and firearms training and recertification. EMT recertification training is held on-site. ICMA was advised that personnel attend additional "outside" training when scheduling and budgets permit. The department has been able to provide only limited in-service training to its personnel over the past several years due to budget constraints. The training schedule and training records reviewed did not list specific training goals. Generic training goals for the department are contained in the *North Castle Police Department Manual*.

In-service or in-house training occurs for Emergency Service Unit (ESU) personnel. In-service training has occurred for proper use of the PR-24 weapons (batons); a brief review of *N.Y.S. Penal Law Art. 35* typically occurs for officers requalifying with their firearms. In-house training was provided for personnel by the commercial vendor (TE) of the department's RMS. It is not clear whether all members of the service had the opportunity to receive

training directly from company representatives, or whether some personnel merely received training from supervisors who had been trained.

The department invited officials from Consolidated Edison (Con Ed) to review “utility safety;” that is, proper procedures regarding electric power and gas lines.

Upon promotion to the rank of sergeant, officers attend a four-week, first-line, basic management course. It is unclear whether all officers receive further executive or advanced training upon promotion from sergeant to the rank of lieutenant. No members of the department have attended the FBI National Academy in more than a decade.

The department does engage in some joint training with the fire department, such as ice rescue procedures and EMT recertification. All such training should be commended and encouraged.

The department does not utilize a formal “turn-out” or roll call process. Officers report and are paid for arriving on-the-hour at the beginning of each shift. (In other words, an officer beginning a tour at 8 a.m. is expected to be dressed, present, and ready for assignment at 0800 hrs.) ICMA views this as a missed opportunity for ongoing informal training and information transfer. Officers are not required to meet with the patrol sergeant at the beginning of the shift, or to log onto their e-mail accounts to review any logs, directives, or reports issued since their last tour.

Section 115-4 of the *North Castle Police Department Manual* establishes a formal field training program. Nevertheless, the department currently does not have any certified field training officers (FTOs). In 2008, when the department last hired police officers, probationary officers were teamed with patrol sergeants or senior officers on an *ad hoc* basis. ICMA was informed

that the department is unable in general to designate one or more officers to work with probationary officers as “it will impact the schedule.”

Recommendations:

- The department must develop and document a more formalized process for selecting, planning, developing, and delivering in-service training. It should establish a formal annual *Department Training Plan/Report* that identifies in-service and executive development training goals and objectives. The department should utilize this report for tracking and reporting the relative level of accomplishment of these goals. This annual report should describe all training needs, challenges, and accomplishments (in terms of topics, training hours performed, and total number of personnel trained). The report must also include a mechanism for incorporating feedback from field personnel, trainers, supervisors, and perhaps the public.
- The training lieutenant should be charged with periodic review of department records concerning vehicle pursuits, department vehicle accidents, use of force and weapon discharges, arrest reports, etc., to determine whether any training or equipment issues need to be addressed. Such review should be documented.
- The department should designate, train, and support one senior member of the department to serve as field training officer (FTO).
- The department should supplement its formal program called for in its *Field Training Manual* (section 115-4 of the department manual). To do so, it should look to the Police Training Officer (PTO) program developed and sponsored by the U.S. Department of Justice, Community Oriented Policing Services (COPS) office. This program is a national model for field training that incorporates community policing and problem-solving principles.

- The department must schedule time at the beginning of each shift for patrol officers to log onto their e-mail accounts, review the prior shift's activity (notable incidents or persistent problems and conditions), review recent communications and directives, and briefly meet with their supervisors. This period (perhaps only fifteen minutes) can be invaluable in terms of reminding officers of rules and regulations and conveying personal direction and organizational expectations. In light of the department's limited use of in-service training for general topics, this is a valuable training opportunity. This issue would need to be addressed via collective bargaining negotiations.
- The department should expand its in-service training program. ICMA recognizes the considerable expense associated with police training. Nevertheless, such training cannot be viewed as a "luxury;" it is an essential part of police work and it is an investment. At minimum, the department should host biannual "legal updates" for all members of the department, as well as periodically review procedures related to the proper handling of emotionally disturbed persons, stop and frisks, vehicle pursuits, integrity management, and similar situations. The topics for training should be selected in advance via the annual *Department Training Plan*. All lessons delivered should utilize a lesson plan with distinct learning goals and objectives. All lesson plans and instructional materials should be maintained permanently.
- In light of recent events in Westchester County and throughout the State of New York, the department should send all uniformed personnel to the Westchester County Police Academy for interactive training on "off-duty confrontations." The department should incorporate a review of such procedures into its ongoing training cycle.
- The department should seek additional joint training opportunities with local fire departments.

E. Strategic Planning and Performance Measurement

All police departments need to set, clearly define, and broadly communicate organizational goals. Similarly, all departments must clearly define “success,” and be able to demonstrate results to stakeholders in terms of enhanced organizational performance.

The department does not utilize an annual reporting system. Instead, it uses a system of “stated goals” for the department and for individual supervisors (described in section 101-4 of the *North Castle Police Department Manual*). This process was developed in order to conform to accreditation guidelines. Unfortunately, this system does not document how or why these goals are important, nor the actual means to achieve them.

The chief solicits supervisors’ personal annual goals. Departmental goals are then derived from these individual goals. A supervisors’ meeting (sometimes more than one meeting) is then held to review and choose goals for the department. A standardized template is not utilized for this process.

These designated department goals are then posted throughout headquarters and distributed via a written memo. The goals are not communicated via electronic means. A midyear “progress meeting” (in June) is held whereby supervisors indicate what progress has been made toward stated goals. A lieutenant is charged with verifying such progress.

An end-of-year recap or “results” meeting is then held with supervisors to review which goals were accomplished. It is not clear whether all supervisors who submit annual goals are informed of actual outcomes relative to these goals. General memoranda are used by supervisors to report their degree of progress towards stated goals. These contain narrative descriptions of performance.

Department goals are not communicated in a formal way to the town board. Similarly, end-of-year recapitulations or midyear reports are not provided to town officials.

The department needs a way to demonstrate (especially quantitatively) its relative level of organizational "success" in achieving stated goals. For example, its mission statement (section 101-2 of the *North Castle Police Department Manual*) states that the organization seeks to "enhance the quality of life in [North Castle]," "by working in partnership with the community... ." The obvious questions are then "*How do you propose to do that?*"; "*What steps will you take?*"; "*How successful has the department been in achieving this goal?*"; and "*How do you know?*" A comprehensive annual reporting system is needed so the department can define organizational "success" and establish strategic goals that clearly focus and document organizational efforts.

Pursuant to its current practices, the department documents the total number of calls received by dispatch code. The department does not, however, routinely track the type of call (by dispatch code) arising within each patrol zone. The fact that the department might have the capability to find this information is irrelevant. The key issue here is that this information is not being tracked and used. It is imperative for all police departments to know exactly *when, where, and why* calls for service are occurring.

The department does not utilize regular command staff meetings of all supervisory personnel. Rather, the chief, lieutenants, and sergeants meet on an "ongoing basis." These informal meetings are not documented. "Job-wide" staff meetings for all personnel have been held from time to time, but on a less-than annual basis. The last meeting of all sergeants took place approximately two years ago.

To inform its management decisions, the department needs to formulate and follow a clear multiyear strategic plan that utilizes timely and accurate data. The strategic plan should be outlined in the *annual reports* and linked to performance goals and objectives. The department must also establish a process/system for collecting, analyzing, reviewing, and reporting performance data

Administrative or *command staff meetings* have been conducted periodically over the years (approximately three to four times per year). Each supervisor is directed to prepare his/her own list of items to be discussed at each meeting. Minutes are not kept of these meetings and they do not follow a standardized agenda. Scheduling of such meetings is problematic and typically results in incurred overtime expenses.

ICMA was informed that the chief regularly meets with town officials to discuss organizational performance. These meetings are not scheduled in advance and do not follow a standardized format or template. The chief reviews data contained in the RMS "as needed." Other town department heads (parks department, highway department, building department, and tax assessor) meet quarterly with the town supervisor.

Lieutenants appear before the town board periodically to discuss such issues as traffic enforcement and budget. These meetings are not scheduled on a regular basis.

A formal process for performance evaluations of all personnel was begun in 1999 and is still in use. ICMA reviewed the evaluation forms and rater's instructions/directions and found them to be adequate and consistent with those used by similar police agencies. Police officers, detectives, and sergeants are evaluated via this process; lieutenants are not.

Patrol officers and sergeants maintain paper memo books that are numbered serially and which have numbered pages. Section 118-3 of the *North Castle Police Department Manual* directs patrol officers to record activities occurring during each tour in narrative form “with sufficient data to enable member[s] to recall an event or access official department reports on the events” (118-3, p. 2). Sergeants also maintain memo books and record “what’s notable” during each shift. Detectives do not maintain memo books. Patrol officers do not prepare daily, weekly, or monthly activity sheets or logs in hard copy. The RMS is used primarily to capture data regarding arrest and summons activity for all members of the service. The administrative lieutenant performs monthly productivity reviews via the CAD and RMS.

The detective sergeant reports directly to the chief. The detective sergeant does not have regularly scheduled meetings with the chief. The detective sergeant prepares annual goals for the detective division.

Detectives do not maintain memo books. Their productivity is recorded via the RMS. Detectives do not prepare daily, weekly, or monthly activity sheets or logs. Work performed by detectives is also recorded via blotter entries on a master calendar. The detective sergeant indicated that he is intimately familiar with all open investigative case files.

While processing arrests, detectives and officers can now utilize LiveScan fingerprint technology.

The detective division does not utilize a comprehensive system for recording and monitoring all productivity within the division. A standardized template is not used for conveying data to the chief. Once again, although performance data might be captured in the RMS, hard-copy files, etc., the key issue here is that this information is not being tracked and used.

In addition to investigating all crimes that occur within North Castle, and responding to serious crimes, detectives are also concerned with “monitoring all countywide criminal activity” (such as narcotics crimes and illegal dumping). Detectives will issue department bulletins as necessary to identify crime patterns and to share information concerning suspects. Detectives participate in the Westchester Intelligence Center and the “Winter Burglary Meeting,” a countywide task force established to deal with widespread burglary patterns.

Interestingly, the lieutenant patrol supervisor supervises the youth officer, a detective who also serves as school resource officer and DARE officer.

Sergeants are directed to review all reports for accuracy and completeness. A lieutenant and sergeants are directed to review official reports and data entries prepared by their subordinates. The department performs regularly scheduled audits of its property management practices. The department does not, however, utilize a formal system of other periodic or random audits and inspections.

An accident review committee, comprised of sergeants and lieutenants, meets quarterly to review accident reports.

Recommendations:

- All police departments must have the capacity to define organizational “success” and to foster accountability for work performed. The department’s mission statement should be reviewed and revised, if necessary. It must be distinct to the North Castle Police Department and must be ‘operationalized.’ That is, the mission statement must be composed of usable statements that indicate what the department intends to do in terms of organizational performance.

- The department should then develop specific strategic goals that flow directly from the mission statement. This then forms the basis of a coherent strategic plan. Each year, the department can then develop specific performance targets to measure its ability to meet these goals. Annual reports should describe these specific goals and track the department's success in achieving them. Departmental goals and objectives can then be revised as necessary. It is imperative that the department develop a comprehensive system for documenting and evaluating organizational performance (in terms of stated goals, performance benchmarks, etc.), as well as an effective mechanism for communicating a strategic vision to members of the department, to town officials, and stakeholders within the community.
- The department must provide a detailed *Annual Report*. This report should include summary data concerning the type and quantity of training hours performed, overtime and sick time expended, department vehicle accidents, and the like. This information should be presented in a standardized format. More importantly, the report should identify organizational goals *and the department's relative level of success in meeting them*. This reporting should provide a meaningful description of work being performed, which will assist in the preparation of personal performance appraisals and the enforcement of professional standards.
- The department should hold regularly scheduled meetings for all supervisory staff to discuss the performance and operations of the department and its personnel. These *command staff meetings* should be scheduled monthly and should include detailed discussion of crime and performance data (such as arrest and summons activity, sick time and overtime expenditures, individual case review, etc.) for the purpose of collaboration, accountability, and the development of

effective strategies. These meetings should be chaired by the chief and follow a standardized agenda. Review of patrol operations, detective division investigations and case updates, traffic enforcement operations, and training updates should always be included and be presented in a particular order. Minutes should be recorded and maintained for appropriate follow-up. These *command staff meetings* should also include a meeting recap in the form of a memorandum distributed throughout the department. This ensures accountability and follow-up and helps to convey goals and strategies.

- In order to optimize the discussions and analysis that take place at these meetings, the department needs an effective system for recording and tracking performance information. It is recommended that all such information be combined into a [single] usable performance measurement system or template. If all such data (or accurate and timely recapitulations) are readily accessible from *one central* database or *data dashboard*, the information is more likely to be consulted/retrieved and used to actively manage daily operations. In essence, this dashboard can serve as an activity report or performance assessment for the entire agency, and can be consulted daily by police supervisors. A central source of key performance data is critical. Multiple sources and locations of information hinder the department's ability to engage in proactive management.
- A data dashboard system can record and track any or all of the following performance indicators:
 1. The total number of training hours performed, type and total number of personnel trained;
 2. The type and number of use of force reports prepared, personnel involved, time and place of occurrence, and general description of circumstances;

3. The geographic location (i.e., zone) and time of all arrests;
 4. The geographic location and time of citations issued;
 5. The type and number of civilian and internal complaints (and dispositions);
 6. The type, number, location, and time of civilian vehicle accidents;
 7. The type, number, location, and time of department vehicle accidents, both "at fault" and "no fault" accidents;
 8. The type, number, location, and nature of all firearm discharges;
 9. The results of systematic and random audits and inspections of all police operations (i.e., calls for service response and dispositions, property receipt and safeguarding, etc.); and
 10. The type, location, and number of any *Terry* stops performed, as well as a description of all individuals involved and a description of all actions taken.
- An effective performance dashboard should also include traditional administration and budgetary measures, such as monthly and annual totals for sick time, comp time, and overtime.
 - The specific performance measures to be tracked and reported at *command staff meetings* is entirely up to the department. All police agencies have unique missions, challenges, and demands. Outside performance benchmarks or measures should not be imposed upon the department; they should be derived from within. It is recommended that all members of the department (and perhaps the community) be consulted to develop a comprehensive set of organizational performance indicators that accurately describe the type and quantity of work being performed. Certain tasks, such as 'residence checks' or traffic duty are likely performed frequently enough that they should appear as regular (i.e., monthly) entries.

- It is imperative that baseline levels be established for all performance categories. This entails measuring a category over a period of months, calculating percentage increases and decreases, computing year-to-date totals, and averaging monthly totals in order to determine seasonal variation and to obtain overall performance levels for the agency. There is likely to be much seasonal variation in the work of the North Castle Police Department. Such analysis can also include sector and individual officer performance review. For example, discrete patterns can emerge from analyzing when and where accidents involving department vehicles occur.
- The department should be vigilant in identifying new performance indicators. The department should review its current indicators and solicit input from all levels of the agency. "Key" performance indicators should be identified, with an understanding that they can always be expanded or modified at a later date. These indicators should always form the basis of discussions at *command staff meetings*.
- Any substantive changes to the current performance management framework must be clearly communicated to, understood by, and acted upon by all members of the department.
- Whenever possible, monthly *command staff meetings* should include and involve rank and file personnel (police officers) so their perspectives concerning current patrol operations, community relations, and organizational challenges and opportunities can be obtained. Authentic and spontaneous dialog should be encouraged at these meetings.
- *Command staff meetings* should utilize simple data visualization tools, such as graphs, maps, and histograms.
- The personal performance evaluations being used must include a process for providing and documenting useful performance feedback to

those being evaluated. Individual performance targets/goals must be linked logically to unit and department goals. It is also imperative that all supervisors continue to receive rater training.

- It is recommended that the department utilize a standard template to convey pertinent performance information to town officials. This would include primarily budgetary and administrative information, such as sick time, comp time, and overtime expenditures, as well as any other measures that the chief and town officials agree to include. The exact list of performance indicators should be determined by the chief and town officials. The important thing is that: 1) regular (i.e., monthly) meetings take place; 2) that timely and accurate performance information be conveyed on a regular basis to town officials; and 3) that performance discussions follow a uniform/standardized template or format.
- The department should develop a process at once for formally evaluating and recording the personal performance of all lieutenants.
- The department must develop *monthly activity sheets* for patrol officers and detectives.
- All police officers and detectives must prepare these *monthly activity sheets* to summarize their personal patrol and investigative activities. It is important for personnel to self-report personal activity, as it enhances an overall sense of supervision and personal accountability. This also serves as a redundant system of checks and balances for important performance measures.
- The department should develop a comprehensive *community outreach program*. The department's community affairs officer should coordinate this effort, and it should include periodic citizen surveys to solicit community input on a variety of issues. Ideally, these surveys would be sponsored by the department, yet be conducted and

analyzed by individuals outside the department. Citizen surveys can serve as an external measure of performance, providing useful feedback so the department can better understand what citizens see as their needs, expectations, and priorities. Surveys also perform a quality control function by asking citizens to describe their past experiences during encounters with the police. Results of citizen surveys can be reported via the department's *annual reports*. The department website could be used to record and summarize citizen response.

- The department should commence a program at once for the study of "aided case" response. Patrol officers apparently respond to a large number of aided cases each month. It is important for supervisors to know exactly how many, what type of calls they are receiving (i.e., what type of illness/injuries), where they are occurring, when, and what responding officers are doing at the scene. If officers are utilizing their EMT skills when responding to these calls, it is very important to properly document and analyze their actions.
- The detective division should utilize a more standardized performance measurement system, one specifically designed for investigatory units. In addition to preparing a monthly activity sheet (which indicates dates and hours worked each month), the division should be required to develop, maintain, and regularly provide performance data indicating the quantity and quality of work performed by the division. This should be done via a standardized form/template (i.e., *Monthly Detective Activity Report*) that would include (but not be limited to) the following performance indicators:
 - Total number and type of active cases;
 - Number/type of new cases received/initiated each month;
 - Number/type of cases closed each month;

- Number/type of arrests made;
- Number/type of summonses issued;
- Number/type of warrants applied for;
- Number/type of warrants executed;
- Type/amount of stolen property reported; and
- Type/amount of stolen property recovered.
- The performance indicators for the detective division should be developed by the chief and the detective sergeant.
- The duties, responsibilities, and performance of the youth officer should be documented and reviewed. ICMA questions whether a department of this size can sustain one designated officer/detective for youth-related activities. The youth officer should be directed to prepare annual goals specific to that role and should regularly report all related activities.
- Objectives for the *department management plan* should be set jointly by the chief and the town supervisor.
- The department should 'operationalize' each objective contained in its *department management plan*. For example, the Field Operations section of the June 2008 report listed "Home inspections of elderly in conjunction with FD." This activity can be quantified by simply recording and regularly reporting the actual number of checks performed. Dichotomous variables (i.e., 'either/or' categories) should be avoided. Thus, when implementing a new program or initiative, rather than stating "pending" or "completed," reports should utilize a scale that can include such categories as "initiated," "partially completed," "substantially completed," etc.
- When a performance target is set by the *department management plan*, it should be tracked weekly or daily as a performance indicator. By continually selecting, tracking, and revising such indicators, the

department can deliver on its stated commitment to foster a culture of accountability.

- The department should redefine the role of its personnel as “public safety” officers. To that end, it is recommended that all patrol officers be encouraged to become EMTs (see additional discussion in the next section).
- The department should encourage its supervisory personnel to apply to, and enroll in the FBI National Academy.

F. Patrol Operations and Staffing Analysis

North Castle is divided into three patrol zones or posts. As per past practice, each patrol shift typically consists of three police officers, each assigned to one of the three patrol posts, plus one sergeant/patrol supervisor and one police officer assigned as desk officer. Therefore, on a typical shift, five uniformed members of the service are assigned.

Depending upon available manpower, the department has been in the practice of “collapsing” the three patrol posts into two. This results in having four uniformed members of the service assigned (two police officers on patrol, one sergeant/patrol supervisor, and one police officer assigned as desk officer).

Typically, when three patrol posts are filled, post 2 is filled by an ESU officer (i.e., a trained emergency services officer). On those occasions when an additional patrol or “floating” car has been assigned, the ESU officer remains assigned to post 2 and the “extra” patrol officer is assigned to directed patrol duties. These directed duties include traffic enforcement in areas that have requested additional enforcement, such as Cedar Hill Road. Thus, when a floating car is staffed, it means six uniformed officers are assigned to the shift.

During summer months, officers are assigned to bicycle patrol in downtown Armonk. These assignments are made in addition to patrol vehicle staffing and are made "when additional manpower is available." In general, bicycle patrols have been well received by the assigned officers and by the public.

Neither the department's current collective bargaining agreement (CBA), nor the stipulated settlement of the 1997 Article 78 proceeding contain a clear "minimum manning" requirement. Rather, the department's current understanding and use of that term stems from past practices.

Ironically, the department is not currently engaged in a formal "community policing program." This is curious in that the department manual references one (119-1) and members of the department pride themselves in their generally proactive orientation towards crime, their rapport with the community, and their overall problem-solving approach to policing. Several officers noted, "We treat everyone who walks into the station as someone's mother, or son – our neighbor." Community members echoed a sentiment of partnership with their police department.

The CAD system is rarely in backlog. In other words, it is unusual for the system to be holding more calls for service than available units. Backlogs have occurred, but typically are in connection with extreme weather events, such as ice storms and general power outages. The department does not track the number of times the CAD system experiences call backlog.

Police officials informed us that "calls for service are largely affected by schools – first week of class, vacations, dismissal, etc." The department has not performed any internal study to document seasonal variation in call volume.

The department's overtime levels have been consistent in recent years. ICMA was informed by both department and town officials that this has traditionally "not been a problem."

A uniformed member of the service performs the joint roles of dispatcher and desk officer on every shift.

Police officers and sergeants rotate through all shifts (i.e., 8 a.m. to 4 p.m., 4 p.m. to midnight, and midnight to 8 a.m.), working four consecutive eight-hour shifts, followed by seventy-two hours off. As per the collective bargaining agreement, police officers work a total of 230.5 days per year. Lieutenants typically work the 8 a.m. to 4 p.m. and 4 p.m. to midnight tours.

Police officers are not divided into specific squads.

Approximately twenty-two members of the department (at various ranks) are certified as emergency services officers. The department has two designated ESU vehicles. One ESU officer is routinely assigned each shift. ESU officers handle all "aided" calls, and are either not assigned to a particular patrol post (and are therefore "floating" throughout the jurisdiction), or typically assigned to post 2 (that is, centrally located).

The department also funds the position of emergency *management* coordinator/officer. This is a trained police and ESU officer who is regularly scheduled (typically the 8 a.m. and 4 p.m. shifts) and has all police powers, but does not respond routinely to calls for service via the CAD system. This officer is never counted towards "minimum manning" staffing levels. This officer performs a number of liaison and administrative tasks, such as grant writing.

The department operates a substation located in a community center. The center provides a small office for officers assigned to the sector/post and

this space is available to the police throughout the day. Officers wishing to use the facility (for example, to prepare paperwork) notify the dispatcher. No CAD entry is made for use of this facility, as officers are generally still available for assignment.

Data provided by the department to ICMA on February 24, 2011 indicate that the total number of arrests made by department personnel dropped dramatically from 2009 to 2010. The department reported 216 arrests during 2008 and 135 for 2010. Interestingly, the new RMS went online on February 3, 2009. Arrest numbers continue to be low relative to the changeover to the new system:

Total Annual Arrests

2006	214
2007	243
2008	216
2009	156 (new RMS system online 2/3/09)
2010	135
2011	23 (through 2/24/11)

Information on the department’s activity provided through the state’s incident-based reporting system (which captures data directly from the department’s RMS) indicates a similar decline in arrest activity during this period.

ICMA requested a breakdown of these aggregate totals to determine how many were made by patrol officers, versus those made by the detective division. That information was not readily available. This is an important performance measure that should be tracked on a regular basis.

The total number of “aided” calls handled each year is a useful measure of workload. An analysis of aggregates from each year can suggest whether or

not the overall need for police services is increasing. The department supplied the following data:

Total Annual Aided Calls Responded To:

2006	463
2007	462
2008	494
2009	468 (projected)
2010	Not yet available

This measure of police performance suggests a steady rate of workload.

The department experienced a marked increase in DUI arrests over a period of several years, due primarily to DUI enforcement details that were funded by federal and state grants.

According to the information and data supplied to ICMA, it is clear that only a small percentage of police patrol time is expended in dealing with serious crime. The vast majority of patrol time is expended in nondirected and/or self-directed patrol activities. In other words, the majority of patrol time is *not* expended in connection with responding to calls for service. When not responding to particular calls for service, patrol officers are directed to perform traffic enforcement, residence checks, and similar proactive patrol duties, as necessary.

A majority of the department's uniformed personnel are certified emergency medical technicians (EMTs). Patrol vehicles are equipped with automatic external defibrillators (AEDs) and all patrol officers are trained in their use.

Detectives respond to all burglaries and serious crimes occurring within the jurisdiction.

ICMA concurs that two *patrol* officers plus one sergeant/patrol supervisor should be considered minimum staffing for all shifts. The scheduling of only one patrol officer and one patrol sergeant poses significant liability and safety issues and should not be considered as a viable staffing option. With that said, it is not clear that staffing more than two patrol officers plus one sergeant/patrol supervisor per shift is necessary during any of the shifts.

Article 78 Proceeding (1999): In 1997, the Police Association of North Castle initiated an Article 78 proceeding alleging violation of Civil Service Law (alleged improper use of police officers as “acting sergeants”). The action resulted in a stipulated settlement that held that one sergeant or lieutenant must be assigned to each tour. The settlement also delineated the process for obtaining supervisors in the event that a shift does not have an available assigned supervisor. However, the settlement does not address the role of patrol versus administrative duties for supervisors. ICMA believes that neither this proceeding, nor the *Westchester County Police Act*, prohibit revising the positions of dispatcher and desk officer, as described in this report. Nevertheless, ICMA strongly suggests that town officials consult counsel prior to making any such alteration.

Recommendations:

- ICMA believes that scheduling two police officers and one sergeant is sufficient to address patrol obligations in North Castle during most shifts.
- The department should hire and train civilian personnel to perform the dispatch function. A properly trained civilian dispatcher can alleviate the need to assign a uniformed police officer to this task each shift, thereby supplementing available patrol manpower. The patrol supervisor can perform the duties of “desk officer,” as necessary (e.g., to supervise the processing of an arrest). ICMA has reviewed the

Westchester County Police Act and believes that it contains no prohibition for such reassignment of duties. The town should consult counsel to confirm.

- The position of emergency management coordinator should be examined with a critical eye. At present, the position is funded through the department's budget, even though this officer is not available on a routine basis to respond to calls for police service. If the department is expected to fund this position, there must be a means of clearly and accurately describing all duties and tasks performed by this officer. The emergency management officer must establish clear annual goals, then routinely report the quality and quantity of all work performed relative to those goals.
- The department should identify those categories of calls for service that *do not require an immediate police response* and make a coordinated effort to inform the public about nonemergency matters that can be handled in-person (at headquarters at a subsequent time) or via e-mail or U.S. mail. The department should build the capacity to take certain nonemergency complaints via e-mail or U.S. mail, such as: lost property; petty thefts of property (e.g., bicycle); criminal mischief/minor property damage, etc. The precise list of such situations should be compiled by the department. Members of the public should have the ability to choose the method of reporting they prefer. The public needs to be informed fully about nonemergency reporting procedures. The department should take proactive steps to educate the public about these alternative reporting methods and include such instructions on its website. The lieutenant should be designated as the officer primarily responsible for the design and implementation of a citizen outreach program that would inform all members of the community about alternative reporting options. The

results of this initiative should be reported via the department's *annual reports*.

- The department should train and support the position of "community affairs officer" and commence, or re-commence, a formal "community policing" program. The community affairs officer should work with community leaders to develop specific community policing goals and strategies and coordinate necessary training. The officer should regularly report to the chief and to the town board and should be charged with supervision and evaluation of all community policing efforts, such as bicycle patrols.

G. Miscellaneous

The department does not have a formal system for recognizing and rewarding exemplary police work. Most similarly-sized police departments have such a system; indeed, several members of the department have received recognition from other agencies while not receiving it from their own department. Failure to have such a system sends a negative message in terms of overall morale. It also results in a missed opportunity, in terms of setting and communicating clear personal performance expectations.

- The department should develop an official recognition program. This should include a clear articulation of various performance levels and associated recognition (such as medals for meritorious conduct and/or official letters of recognition). Rewards such as additional personal leave days or "points" towards promotion would obviously need to be addressed in collective bargaining. Nevertheless, the chief should develop and adopt a system of recognition that includes, at the very least, official letters of recognition and formal commendations. Awards ceremonies could be held annually or biannually.

ICMA's data analysis indicates the department expends a great deal of resources and time responding to false alarms, particularly at locations with a chronic false alarm problem. The town does charge a fee to property owners for such repeated calls, but ICMA notes that the rate currently charged by the town is relatively low compared to that of other communities.

- The department should institute a *chronic alarm abatement program*. The purpose of the program would be to reduce significantly the number of such calls arising within North Castle. This program can be coordinated by the department's community affairs officer and would involve an education and outreach program to inform the public of the costs, in terms of lost productivity, of repeated "false" alarms at commercial and residential locations. The community affairs officer can identify those locations with a problem (for example, more than three calls in a two-year period), oversee the imposition and collection of fees for unnecessary calls, and track the overall rate of such calls for service. The officer would also report regularly on the program's results.
- The fees charged to property owners for unnecessary chronic alarms should be increased substantially. This would serve as a general deterrence, would increase overall police productivity, and would contribute to the town's resource stream.

H. Options for Maximizing Department Efficiency

Nationwide, state and local governments are discussing the need for the plethora of police and fire agencies that exist and questioning the logic of having so many distinct agencies. Many departments developed largely by historical accident, as the conventional wisdom of the past led communities

to establish “their own” police and fire departments. Today, economic realities prevent any community from funding redundant or unnecessary services. ICMA therefore suggests that the Town of North Castle examine the following options for maximizing organizational efficiencies:

Option A, Possible Merger With Another Law Enforcement Agency and/or Shared Services:

Simply stated, ICMA does not view complete merger with another police agency as a viable option. North Castle is an extremely diverse community (in terms of demographics and geography). The department provides a particularly high level of personalized police services to the citizens of North Castle. It is highly unlikely that any adjoining law enforcement agency could assume full responsibility for policing this community, and reduce overall operational costs while at the same time maintaining current or minimum standards of police service. Nevertheless, town officials are encouraged to open discussions with other police agencies to explore this possibility. These discussions will help determine the shape of any proposals and the cost of police services described in this report.

ICMA believes a far more fruitful question is whether *some services*, such as investigations or dispatch, can be either partially or fully combined with those of an adjoining agency. Salaries represent a major portion of the town’s overall police expenditures. Therefore, any reduction in normal staffing levels will have a direct effect upon overall operational costs.

ICMA encourages the town and the department to actively track the work of the detective division to determine what level of productivity is baseline “normal” for this unit. Consideration can then be given to whether to reduce that unit’s staffing by either attrition or reassignment. The town might be able to identify an adjoining jurisdiction that wishes to combine its detective

personnel and resources with those of North Castle, perhaps during particular shifts (such as the “late tour.”) While a multidepartment detective unit of this type might appear fiscally attractive, ICMA questions whether the citizens of North Castle would appreciate having major (i.e., serious felony) cases investigated by personnel employed by another jurisdiction. This is an issue that bears further discussion and consideration by both the police and the community.

Similarly, while a combined “off-site” police dispatching system seems to be a logical source of expenditure savings, it is unclear whether the citizens of North Castle would appreciate having the police headquarters “closed” to walk-in traffic. Perhaps a better approach is to combine services only during certain shifts.

ICMA believes that the most logical and effective cost savings action is to “civilianize” the position of police dispatcher and reassign those officers currently performing the duties of desk officer to patrol.

The issue of combined services should be explored going forward as the department begins providing town officials with timely and accurate data about current standards of services (that is, the quantity and quality of services currently being delivered by the police).

New York Governor Andrew Cuomo has been quoted as saying, “We need to think in terms of consolidation and merger and shared services, not everyone’s government has to do everything” (*Adirondack Daily Enterprise*, July 24, 2010). Michigan Governor Rick Snyder recently presented a government reform package that calls for the merger of police and firefighter services in that state (*The Detroit News*, March 20, 2011). Clearly, state governments have begun challenging local governments to think creatively about these issues. Government funding will be made available in New York State to explore viable options.

North Castle should take a leading role in Westchester County and invite neighboring communities to begin substantive discussions about these issues. At the very least, North Castle should direct its police and fire services to explore active collaborations that can result in operational efficiencies. Before doing so, however, the people of North Castle and their officials need to be very clear about what level of service they are willing to pay for. This requires further investigation and open discussion within the community.

Option B, “Rightsizing” the Department, through Attrition and

Reassignments: The true question is whether the department, as currently structured, is “right-sized” for the community. No department can staff to “worst case scenario” levels, simply because whatever “worst case scenario” one can imagine, one can always invent something even worse. The goal should be to staff at levels to meet workload that can be expected on a routine basis and then develop alternative strategies to handle the rare event. With the numerous law enforcement agencies working in and near the community (Westchester County, state police, neighboring jurisdictions), this should be relatively easy to accomplish.

ICMA believes that the performance management framework contained in this report will afford the town and police administrators the ability to recognize baseline workload levels and to assign personnel accordingly. In the event that a need is identified for additional personnel at the rank of police officer to perform patrol duties, a decision can be made to either reassign personnel from other ranks to the patrol function, or to hire additional police officers. As the selection and training period for police officers is quite lengthy, hiring decisions should be made well in advance of actual need.

Option C, Additional Duties/Responsibilities for Patrol Officers:

ICMA views the delivery of public safety services as a “system.” As such, the department should consider broadening the scope of duties and responsibilities of its patrol personnel.

The Town of North Castle has experienced difficulty recently in attracting volunteers for its fire protection.

- The department should consider adequately training and equipping its patrol personnel to utilize modern fire interruption technologies (i.e., fire “knock down” tools) to combat structure fires. Many police departments that have experimented with these devices have had considerable success. In the hands of trained first-responders like the police, these fire interruption tools can “knock down” fire and temperatures in seconds, making a subsequent interior fire attack and/or personal rescue far safer. Well-trained police officers could supplement traditional firefighting services, thereby making firefighting operations safer. It would also provide enhanced protection for homeowners, and possibly result in enhanced life-saving capabilities. Such a move would also assist a fire department that might be struggling to attract sufficient volunteers.
- Initially, the police department can train officers who volunteer to perform these additional duties when called upon. These officers could receive financial compensation for their enhanced training and broader scope of responsibilities. Going forward, the town can then consider whether to train new hires to use the same tools to eventually reach a fully cross-trained force. Studies show that “public safety” departments can provide the same level of service as separate police and fire departments at a lower cost or higher levels of service for the same cost.

- Rather than being limited to traditional police and enforcement activities, all patrol personnel should be trained to serve as EMTs, perhaps with advanced cardiac certification. Police are often the very first to arrive on the scene of a life threatening, but noncriminal, emergency. Expansion of officers' duties and responsibilities while on patrol can provide a valuable service to the town and help to justify current staffing levels.

I. Conclusions

The North Castle Police Department is an effective organization, staffed by competent professionals who deliver a high level of police services. The critical question raised in this report is whether, in light of continued fiscal demands, the department has the capacity to closely monitor its operations to maximize organizational efficiency and effectiveness. Specifically, the department and the North Castle community need to consider jointly whether present staffing levels are appropriate in terms of adequately providing for community and officer safety without habitually "overstaffing" any particular shift or rank.

If the department acts upon the recommendations presented above, ICMA is confident that the department will quickly develop an ability to set organizational expectations by means of clearly-stated annual goals, and to regularly measure and report its progress towards those goals. The department and town officials can then use the information regularly generated from performance measurements and reports to identify level(s) of work performed relative to shift staffing levels. Similarly, redefining the roles of chief and lieutenant should reveal additional operational efficiencies.

Performance information is useless unless it is actually *used* for decision support. Just having the data is not enough; it must be used and

communicated. The department and town officials therefore share an obligation to identify a usable set of performance metrics that are both transparent and meaningful.

In addition to “rightsizing” the department, it is necessary to enhance its connection with the community. This should take the form of a structured community outreach program that incorporates community crime prevention activities, education about the department’s new reporting procedures, and perhaps an enhanced “public safety” role for its officers.

Finally, it is clear that the collective bargaining agreement will need to be adjusted in order to accomplish several of the recommendations stated above. These decisions, like the decisions related to the department’s future hiring needs, can only be based upon “real data.” The performance framework suggested in this report will provide such information.

IV. Data Analysis

A. Introduction

This data analysis on police operations in North Castle, New York focuses on three areas: workload, deployment, and response times. These three areas are related almost exclusively to patrol operations, which constitute a significant portion of the police department's personnel and financial commitment.

All information in this analysis was developed directly from data recorded by the North Castle dispatch center.

The majority of the first section of the report, concluding with Table 8, uses the call and activity data for the entire year. For the detailed workload analysis and the response-time analysis, we use two four-week sample periods. The first period is the month of February 2010 (February 1 to February 28), or winter, and the second period is the month of August 2010 (August 1 to August 28), or summer.

B. Workload Analysis

As with similar studies we've conducted, 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, assumptions, and decisions below.

- A large percentage (22 percent, or approximately 2,200) of events involving patrol units showed less than thirty seconds of time spent on scene. We call this zero time on scene.
- The dispatch center's computer software generates a large number of event codes. This led to 153 different event descriptions, which we reduced to 20 categories for our tables and 9 categories for our figures.
- Five percent or approximately 500 events for the year, involving patrol units were missing arrival times.
- We included a number of activities as "directed patrol" work including "Door Checks." These are perfectly reasonable to include; however, the time required to accomplish these tasks was documented improperly. Frequently, these tasks appeared to take more than five hours at a time. This fact will be revisited in comments accompanying Figures 23 through 26.
- The data's time stamps only included information accurate to the nearest minute. In most electronic databases, time data is accurate to the second.

Our study team has often worked with many of these problems with event data in other jurisdictions. To identify events that were canceled en route, we assumed zero time on scene to account for a significant portion of them. As stated, any event with an on-scene time of less than thirty seconds was labeled zero time on scene.

We identified self-initiated activities in a number of ways.

- First, we used the data's source field to identify patrol-initiated activities. Any event whose source was listed as "police radio" was considered self-initiated.
- In addition, any out-of-service or directed-patrol event was considered self-initiated.
- Finally, any event with a response time of fifteen seconds or less was also considered self-initiated.

When we analyze a set of dispatch records, we go through a series of steps that we detail as follows.

- We first process the data to improve its accuracy. For example, we remove duplicate units recorded on a single event. In addition, we remove records that do not indicate an actual activity. We also remove records that are incomplete. This includes situations where there is not enough time information to evaluate the record.
- At this point, we have a series of records that we call "events." We identify these events in three ways.
 - We distinguish between patrol and nonpatrol units.
 - We assign a category to each event based upon its description.
 - We indicate whether the call is "zero time on scene," "police-initiated," or "other-initiated."
- Finally, we remove all records that do not involve a patrol unit to get a total number of patrol-related **events**.
- We focus on a smaller group of events designed to represent actual **calls** for service by removing the following:
 - All events with no officer time spent on scene.

- All events indicating an out-of-service activity.
- All events documenting a directed patrol activity.

In this way, we first identify a total number of records, then limit ourselves to patrol events, and finally focus on calls for service.

To briefly review the data received, in the period from January 1 to December 31, 2010, there were approximately 9,800 events that included a patrol officer as either the primary or secondary unit.

Note: ICMA was provided with a document that indicated that the total “calls for service” received by the department for the period January 1, 2010 – October 25, 2010 was 14,444. ICMA has no direct knowledge as to how this figure was calculated, whether it is accurate, or why it varies so dramatically from ICMA’s total of 9,777. We suspect that it includes calls that were received but not actually *handled* by the department, and that the figure of 14,444 includes several thousand “calls” that were either not captured and recorded by the department’s CAD system, or did not require the dispatch of one or more patrol units. Applying the methodology described above, ICMA’s research yields a number (9,777 calls recorded and handled) that is far more significant in terms of analyzing actual work performed.

When focusing on our four-week periods, we analyzed 694 events in winter (February 2010) and 742 events in summer (August 2010). 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 eight hours. For the entire year, we excluded fewer than fifty calls from our analysis.

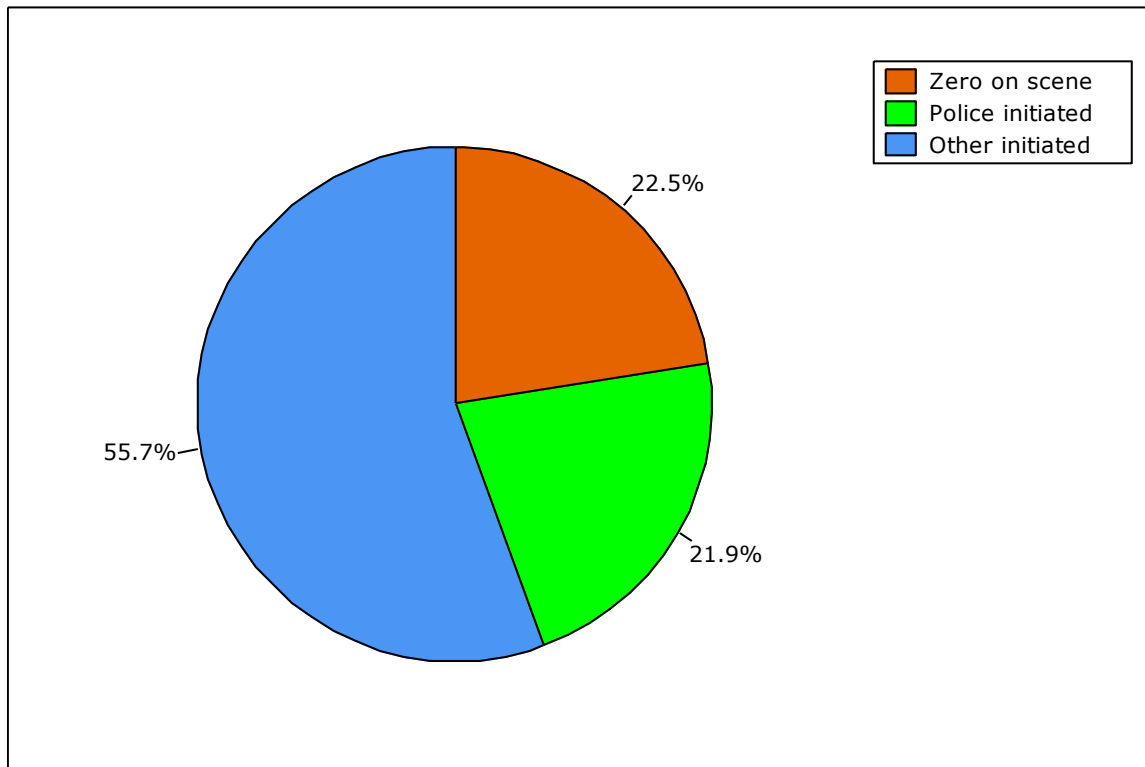
In the period from January to December 2010, the police department reported an average of 26.8 events for service per day. As mentioned, 22 percent of these events (6.0 per day) showed no unit time spent on the call.

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 (e.g., crime, traffic). Workloads are measured in average work hours per day.

We used twenty call categories in our tables and nine categories in our figures. We show these call categories in the chart below.

Table Categories	Figure Categories
Prisoner-arrest	Arrest
Prisoner-transport	
Assist other agency	Assist other agency
Crime-persons	Crime
Crime-property	
Directed patrol	Directed patrol
Aided/Medical/Fire	General noncriminal
Animal calls	
Miscellaneous	
Utility/Electric/Water/Gas	
Alarm	Investigations
Check/Investigate	
E-911 error call	
Out of service-administrative	Out of service
Out of service-personal	
Disturbance	Suspicious incident
Suspicious person/vehicle	
Accident	Traffic
Traffic direction/control/safety	
Traffic enforcement	

Figure 1. Percentage Events per Day, by Initiator



Note: Percentages are based on a total of 9,777 events.

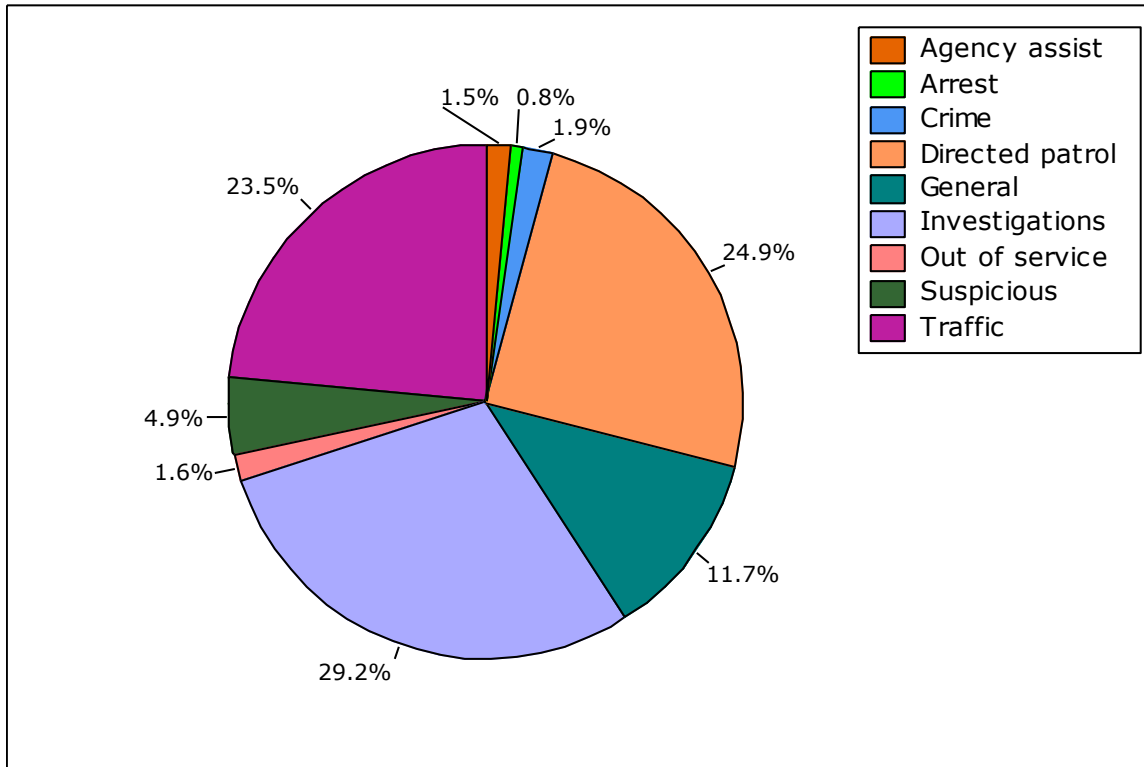
Table 1. Events per Day, by Initiator

Initiator	Total Events	Events per Day
Zero on scene	2,195	6.0
Police-initiated	2,138	5.9
Other-initiated	5,444	14.9
Total	9,777	26.8

Observations:

- Twenty-two percent of the events had zero time on scene.
- Twenty-two percent of all events were police-initiated.
- More than half of all events were other-initiated.
- There was an average of twenty-seven events per day, or 1.1 per hour.

Figure 2. Percentage Events per Day, by Category



Note: The figure combines categories in the following table according to the description on page 56.

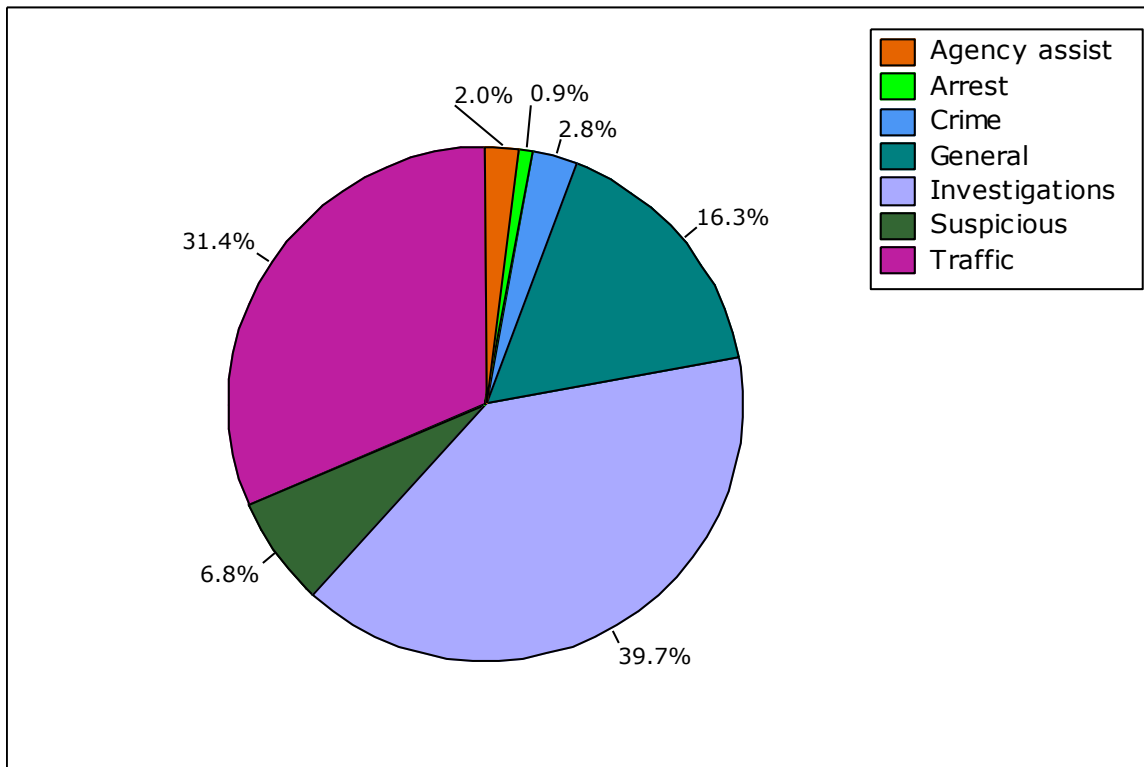
Table 2. Events per Day, by Category

Category	Total Events	Events per Day
Accident	417	1.1
Aided/Medical/Fire	539	1.5
Alarm	1,798	4.9
Animal calls	229	0.6
Assist other agency	150	0.4
Check/Investigate	445	1.2
Crime-persons	73	0.2
Crime-property	114	0.3
Directed patrol	2,434	6.7
Disturbance	65	0.2
E-911 error call	607	1.7
Miscellaneous	245	0.7
Out of service-administrative	155	0.4
Out of service-personal	5	0.0
Prisoner-arrest	9	0.0
Prisoner-transport	67	0.2
Suspicious person/vehicle	415	1.1
Traffic direction/control/safety	579	1.6
Traffic enforcement	1,297	3.6
Utility/Electric/Water/Gas	134	0.4
Total	9,777	26.8

Observations:

- The top three categories (investigations, directed patrol, and traffic events) accounted for 78 percent of events.
- Twenty-nine percent of events were investigations.
- Twenty-five percent of events were directed patrol events.
- Twenty-four percent of events were traffic-related events.
- Two percent of events were crime related.
- Directed patrol and out-of-service events accounted for 27 percent of the events. These are removed when we examine calls for service starting with the next figure and table.

Figure 3. Percentage Calls per Day, by Category



Note: The figure combines categories in the following table according to the description on page 56.

Table 3. Calls per Day, by Category

Category	Total Calls	Calls per Day
Accident	408	1.1
Aided/Medical/Fire	532	1.5
Alarm	1,687	4.6
Animal calls	207	0.6
Assist other agency	134	0.4
Check/Investigate	346	0.9
Crime-persons	73	0.2
Crime-property	113	0.3
Disturbance	65	0.2
E-911 error call	575	1.6
Miscellaneous	208	0.6
Prisoner-arrest	6	0.0
Prisoner-transport	55	0.2
Suspicious person/vehicle	382	1.0
Traffic direction/control/safety	430	1.2
Traffic enforcement	1,230	3.4
Utility/Electric/Water/Gas	125	0.3
Total	6,576	18.0

Methodology:

We focus here on recorded calls rather than recorded events. This means we removed events with zero time on scene, directed patrol events, and out-of-service events.

Observations:

- There was an average of 18 calls per day, or 0.8 per hour.
- The top three categories (investigations, traffic calls, and general noncriminal calls) accounted for 87 percent of calls.
- Forty percent of calls were investigations.
- Thirty-one percent of calls were traffic related.
- Sixteen percent of calls were in the general noncriminal category.
- Three percent of calls were crime related.

Figure 4. Calls per Day, by Initiator and Months

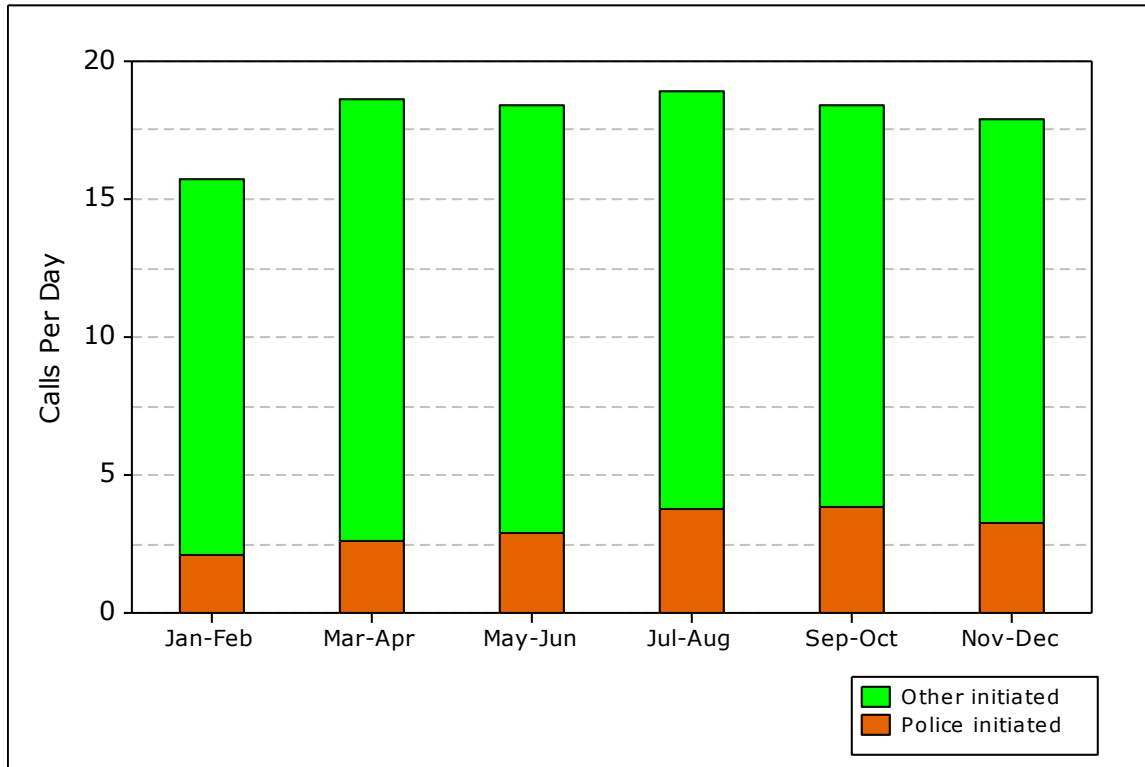


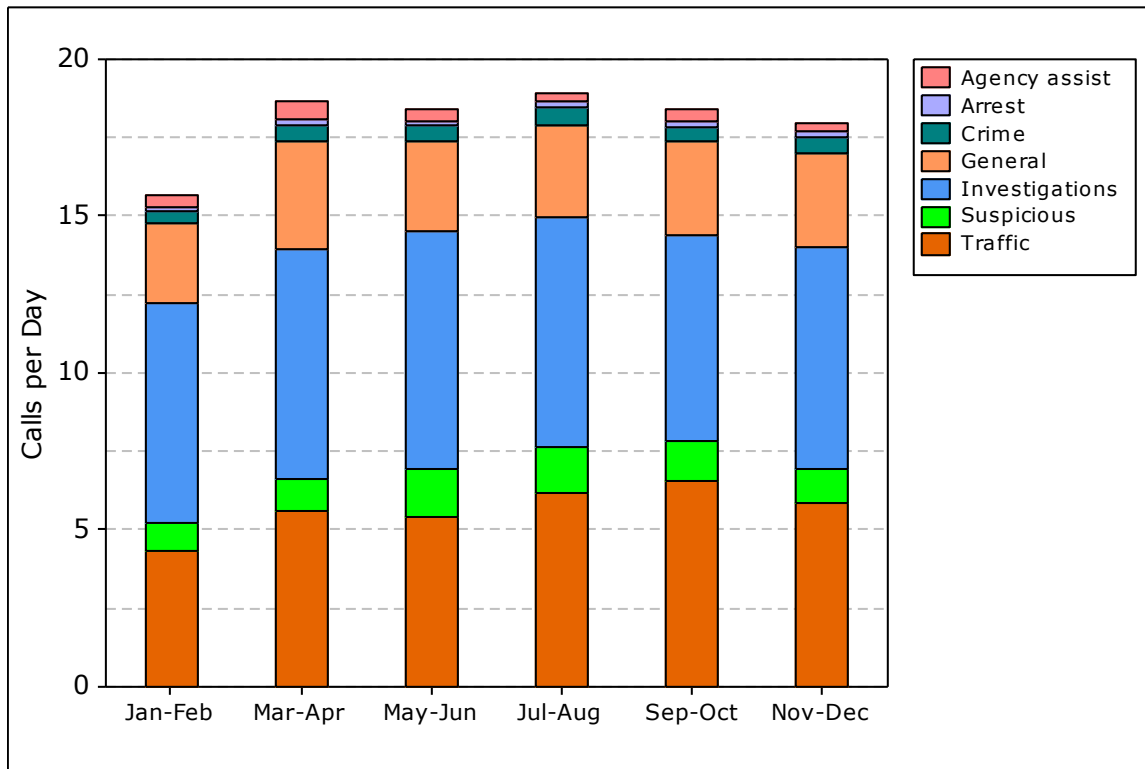
Table 4. Calls per Day, by Initiator and Months

Initiator	Jan-Feb	Mar-Apr	May-Jun	Jul-Aug	Sep-Oct	Nov-Dec
Police-initiated	2.1	2.6	2.9	3.8	3.9	3.2
Other-initiated	13.6	16.0	15.5	15.2	14.5	14.7
Total	15.7	18.6	18.4	18.9	18.4	17.9

Observations:

- The number of calls was smallest from January to February 2010.
- The number of calls was largest from July to August 2010.
- The months with the most calls had 21 percent more calls than the months with the fewest calls.
- For police-initiated calls, the period September to October 2010 had the most calls, with 86 percent (an additional two calls per day) more than the period of January to February 2010, which had the fewest.
- For other-initiated calls, the period of March to April 2010 had the most calls, with 18 percent more than the period of January to February 2010, which had the fewest.

Figure 5. Calls per Day, by Category and Months



Note: The figure combines categories in the following table according to the description on page 56.

Table 5. Calls per Day, by Category and Months

Category	Jan-Feb	Mar-Apr	May-Jun	Jul-Aug	Sep-Oct	Nov-Dec
Accident	1.0	1.2	1.1	1.1	1.0	1.2
Aided/Medical/Fire	1.4	1.5	1.5	1.3	1.4	1.6
Alarm	4.6	4.5	4.7	4.9	4.2	4.8
Animal calls	0.3	0.6	0.6	0.8	0.7	0.5
Assist other agency	0.4	0.6	0.4	0.3	0.3	0.2
Check/Investigate	0.8	1.0	1.5	0.9	0.9	0.7
Crime-persons	0.2	0.2	0.2	0.2	0.2	0.2
Crime-property	0.2	0.3	0.4	0.4	0.3	0.3
Disturbance	0.1	0.1	0.2	0.3	0.3	0.0
E-911 error call	1.5	1.9	1.4	1.5	1.5	1.6
Miscellaneous	0.4	0.6	0.5	0.7	0.5	0.7
Prisoner-arrest	0.0	0.0	0.0	0.0	0.0	0.0
Prisoner-transport	0.1	0.1	0.1	0.2	0.2	0.2
Suspicious person/vehicle	0.8	1.0	1.3	1.2	1.0	1.0
Traffic direction/control/ safety	1.3	1.3	0.8	1.1	1.3	1.3
Traffic enforcement	2.1	3.1	3.5	4.0	4.2	3.3
Utility/Electric/ Water/Gas	0.3	0.8	0.3	0.2	0.3	0.2
Total	15.7	18.6	18.4	18.9	18.4	17.9

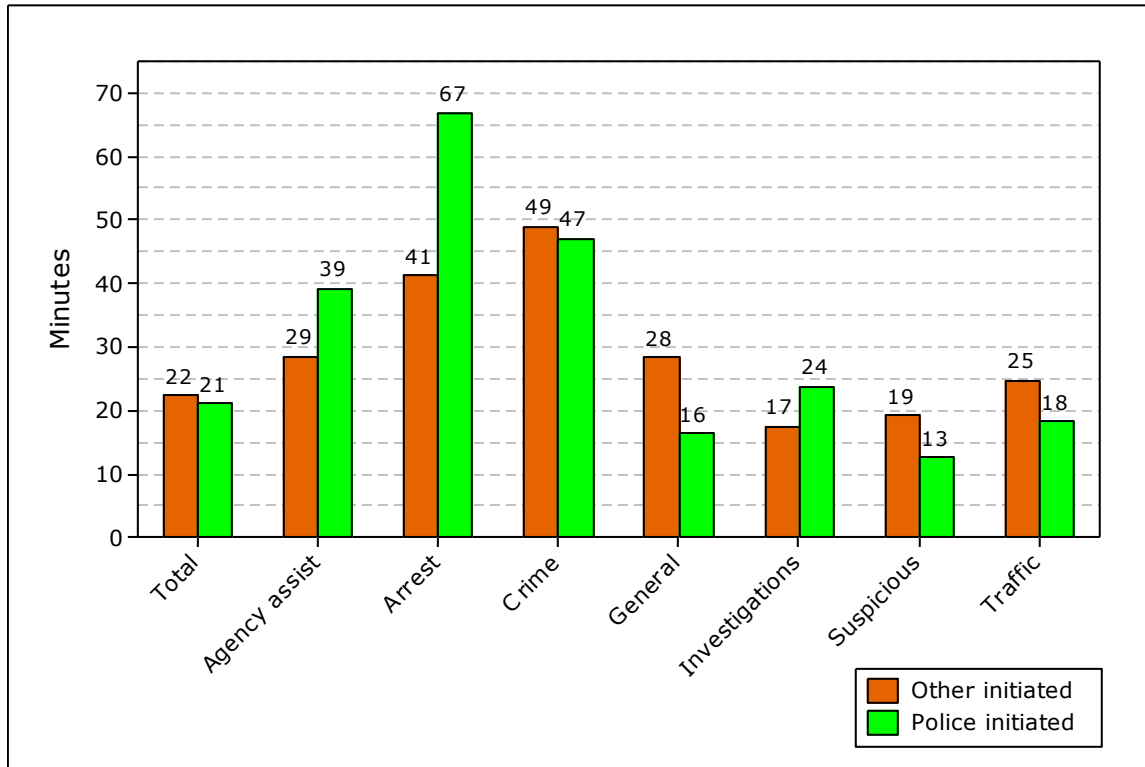
Methodology:

Calculations were limited to calls rather than events.

Observations:

- Investigations were the most common type of activities throughout the year.
- Investigations averaged between 6.6 and 7.6 calls per day throughout the year.
- Crime calls varied between 0.4 and 0.6 per day throughout the year. This was between 2.5 and 3.2 percent of total calls.
- The top three categories averaged between 86 and 89 percent of total calls throughout the year.

Figure 6. Average Occupied Times, by Category and Initiator



Note: The figure combines categories using weighted averages from the following table according to the description on page 56.

Table 6. Primary Unit's Average Occupied Times, by Category and Initiator

Category	Police-initiated		Other-initiated	
	Total Calls	Minutes	Total Calls	Minutes
Accident	35	25.6	373	33.6
Aided/Medical/Fire	15	19.5	516	30.0
Alarm	9	13.6	1,678	15.6
Animal calls	6	9.1	201	18.3
Assist other agency	16	39.2	117	28.5
Check/Investigate	13	30.7	332	34.8
Crime-persons	8	74.8	65	45.3
Crime-property	6	10.0	107	51.2
Disturbance	0	N/A	65	17.4
E-911 error call	1	21.8	573	12.7
Miscellaneous	13	13.5	195	29.1
Prisoner-arrest	4	76.0	2	27.7
Prisoner-transport	49	66.1	6	45.6
Suspicious person/vehicle	27	12.6	355	19.5
Traffic direction/control/safety	97	16.3	332	26.0
Traffic enforcement	824	18.2	405	15.3
Utility/Electric/Water/Gas	6	21.3	119	35.9
Total	1,129	21.1	5,441	22.3

Note: We removed six calls with inaccurate busy times.

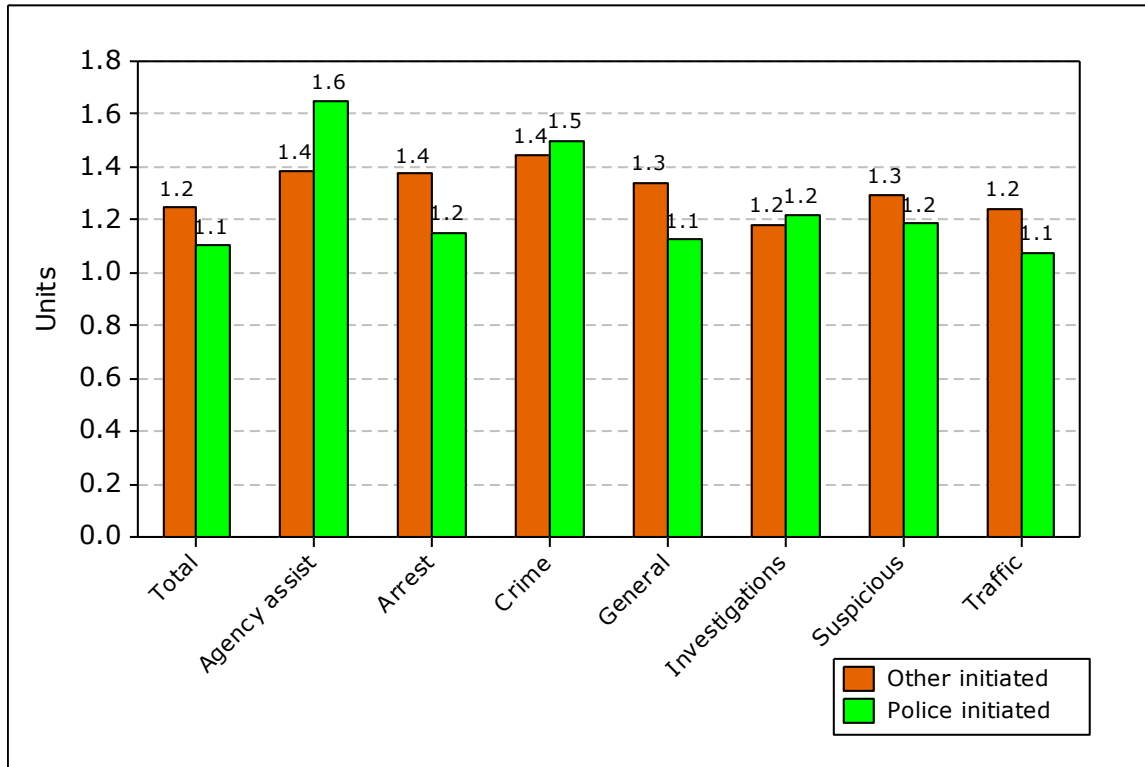
Methodology:

This information is limited to calls and excludes all events that show a zero time on scene. A unit's occupied time is measured as the time from when it is dispatched until it becomes available again to respond to a call. The times shown are the average occupied times per call for the primary unit, rather than the total occupied time for all units assigned to a call.

Observations:

- If we focus on the categories displayed within the figure and exclude categories containing fewer than ten calls, we see that a unit's average time spent on a call ranged from thirteen to sixty-seven minutes overall.
- The longest average times were spent on calls involving arrests that were police-initiated.
- Police-initiated traffic calls (enforcements and accidents) averaged eighteen minutes per call, whereas other-initiated traffic calls averaged twenty-five minutes per call.
- Crime calls averaged forty-seven minutes for police-initiated calls and forty-nine minutes for other-initiated calls.

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

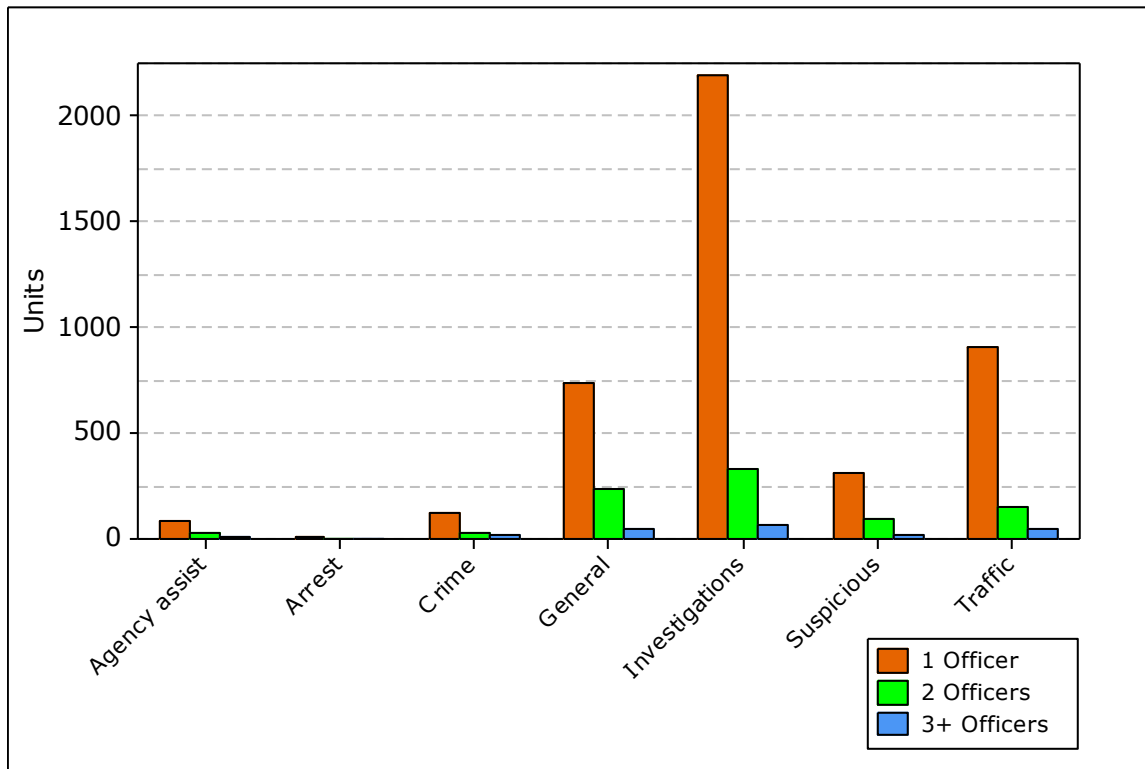


Note: The categories in this figure use weighted averages to combine those of the following table according to the description on page 56.

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

Category	Police-initiated		Other-initiated	
	Average	Total Calls	Average	Total Calls
Accident	1.3	35	1.4	373
Aided/Medical/Fire	1.2	15	1.4	517
Alarm	1.1	9	1.2	1,678
Animal calls	1.0	6	1.2	201
Assist other agency	1.6	17	1.4	117
Check/Investigate	1.3	13	1.6	333
Crime-persons	1.9	8	1.8	65
Crime-property	1.0	6	1.2	107
Disturbance	0.0	0	1.1	65
E-911 error call	1.0	1	1.0	574
Miscellaneous	1.1	13	1.3	195
Prisoner-arrest	1.0	4	1.0	2
Prisoner-transport	1.2	49	1.5	6
Suspicious person/vehicle	1.2	27	1.3	355
Traffic direction/control/safety	1.1	98	1.2	332
Traffic enforcement	1.1	825	1.1	405
Utility/Electric/Water/Gas	1.2	6	1.3	119
Total	1.1	1,132	1.2	5,444

Figure 8. Number of Responding Units, by Category



Note: The categories in this figure use weighted averages to combine those of the following table according to the description on page 56.

Table 8. Number of Responding Units, by Category, Other-initiated Calls

Category	Responding Units		
	One	Two	Three or More
Accident	267	67	39
Aided/Medical/Fire	331	157	29
Alarm	1,449	202	27
Animal calls	167	30	4
Assist other agency	83	27	7
Check/Investigate	185	111	37
Crime-persons	35	14	16
Crime-property	87	16	4
Disturbance	58	6	1
E-911 error call	556	16	2
Miscellaneous	149	38	8
Prisoner-arrest	2	0	0
Prisoner-transport	4	1	1
Suspicious person/vehicle	257	84	14
Traffic direction/control/safety	275	49	8
Traffic enforcement	366	36	3
Utility/Electric/Water/Gas	95	16	8
Total	4,366	870	208

Methodology:

The information in Table 7 and Figure 7 is limited to calls and excludes events with zero time on scene, out-of-service records, and directed patrol activities. The information in Table 8 and Figure 8 is further limited to other-initiated calls.

Observations:

- The overall mean number of responding units was 1.1 for police-initiated calls and 1.2 for other-initiated calls.
- The mean number of responding units was a maximum of 1.6 for police-initiated calls involving other agency assists.
- Eighty percent of all other-initiated calls involved one responding unit.
- Sixteen percent of all other-initiated calls involved two responding units.
- Four percent of all other-initiated calls involved three or more units.
- The largest group of calls with three or more responding units involved investigations, followed by traffic-related and general noncriminal calls.

Figure 9. Percentage Calls and Work Hours, by Category, February 2010

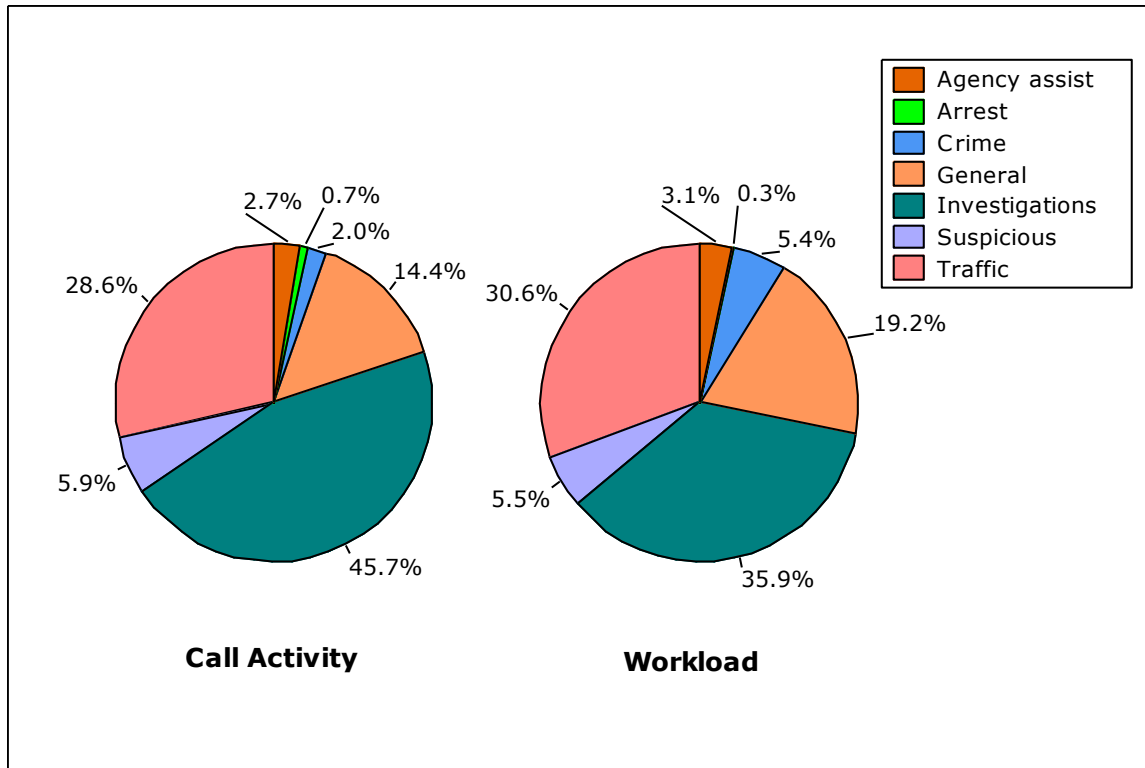


Table 9. Calls and Work Hours per Day, by Category, February 2010

Category	Per Day	
	Calls	Work Hours
Arrest	0.1	0.0
Assist other agency	0.4	0.2
Crime	0.3	0.4
General noncriminal	2.3	1.3
Investigations	7.3	2.5
Suspicious incident	0.9	0.4
Traffic	4.5	2.1
Total	15.9	6.8

Methodology:

Workload calculations focused on calls rather than events.

Observations:

- Total calls in February averaged 16 per day, or 0.7 per hour.
- Total workload averaged seven work hours per day, meaning that an average of 0.3 officers per hour were busy responding to calls.
- Investigations constituted 46 percent of calls and 36 percent of workload.
- Traffic related calls constituted 29 percent of calls and 31 percent of workload.
- General noncriminal calls constituted 14 percent of calls and 19 percent of workload.
- Crimes constituted 2 percent of calls but 5 percent of workload.
- The top three categories constituted 89 percent of calls and 86 percent of workload.

Figure 10. Percentage Calls and Work Hours, by Category, August 2010

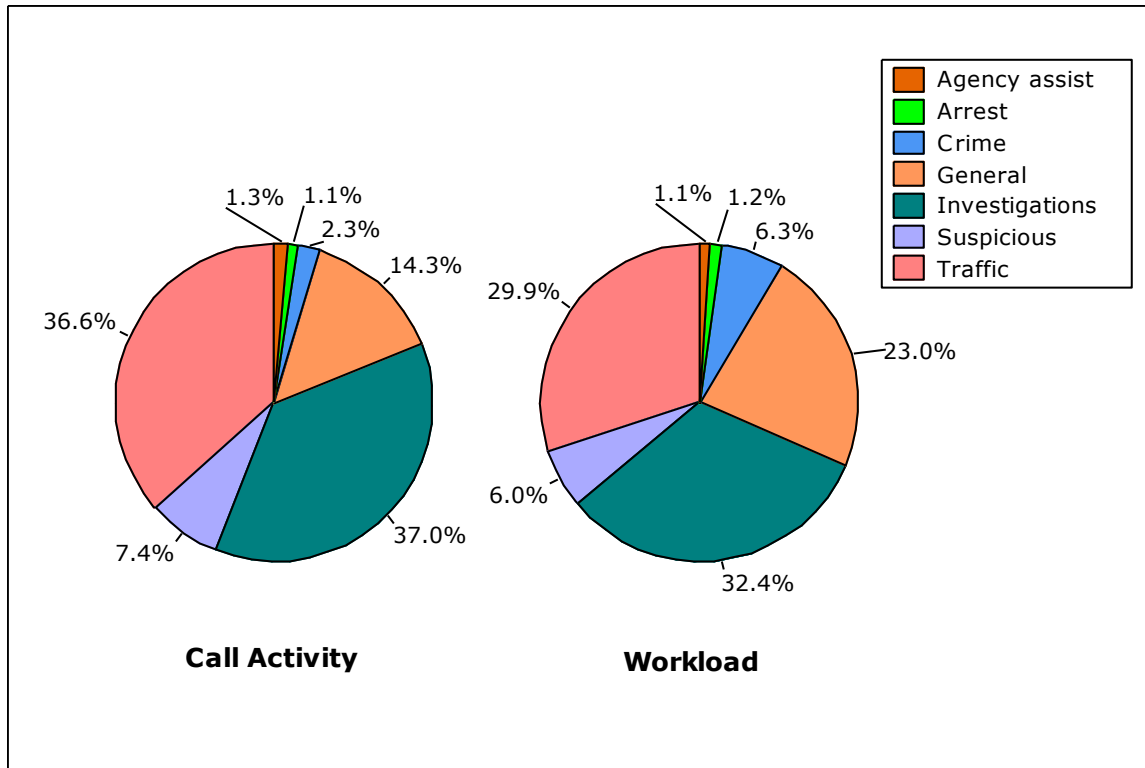


Table 10. Calls and Work Hours per Day, by Category, August 2010

Category	Per Day	
	Calls	Work Hours
Arrest	0.2	0.1
Assist other agency	0.3	0.1
Crime	0.4	0.5
General noncriminal	2.7	1.9
Investigations	7.0	2.6
Suspicious incident	1.4	0.5
Traffic	6.9	2.4
Total	18.9	8.1

Observations:

- In August, the total calls per day and workload were greater than in February.
- Total calls averaged nineteen per day, or 0.8 per hour.
- Total workload averaged 8.1 work hours per day, meaning that an average of 0.3 officers per hour were busy responding to calls.
- Investigations constituted 37 percent of calls and 32 percent of workload.
- Traffic related calls constituted 37 percent of calls and 30 percent of workload.
- General noncriminal calls constituted 14 percent of calls and 23 percent of workload.
- Crimes constituted 2 percent of calls but 6 percent of workload.
- The top three categories constituted 88 percent of calls and 85 percent of workload.

C. Deployment

The police department's main patrol force includes regular patrol officers and supervisors. These supervisors included those patrol sergeants and those lieutenants responding to calls. We only examined deployment information for four weeks in winter (February 2010) and four weeks in summer (August 2010).

The patrol force operates on three 8-hour shifts starting at midnight, 8 a.m., and 4 p.m. The police department deployed an average of 3.7 officers during the 24-hour day in winter (February) and 3.5 officers during the 24-hour day in summer (August).

In this section, we describe the deployment and workload in distinct steps, distinguishing between summer and winter, and between weekdays and weekends:

- First, we focus on patrol deployment, with and without additional units.
- Next, we compare the deployment against workload based upon other-initiated calls for service.
- Afterwards, we draw a similar comparison while including police-initiated workload.
- Finally, we draw a comparison based upon "all" workload, which includes out-of-service and directed patrol workload.

Comments follow each set of four figures, with separate discussions for summer and winter.

Figure 11. Deployed Officers, Weekdays, February 2010

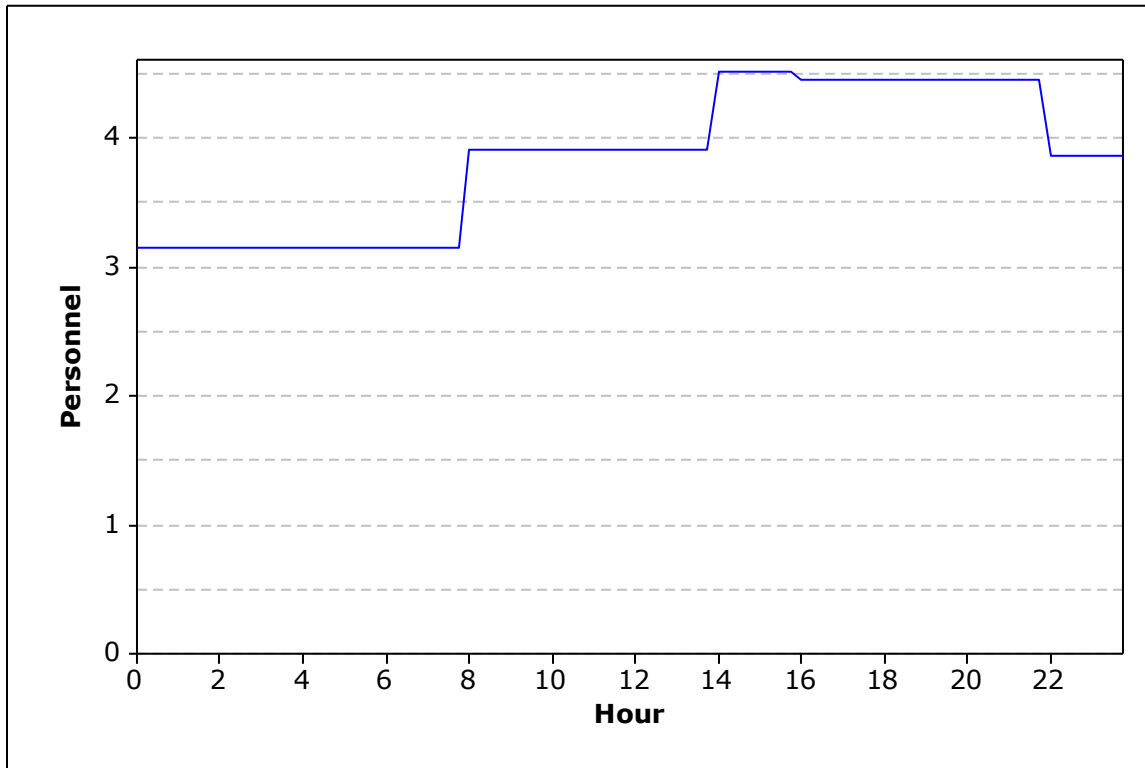


Figure 12. Deployed Officers, Weekends, February 2010

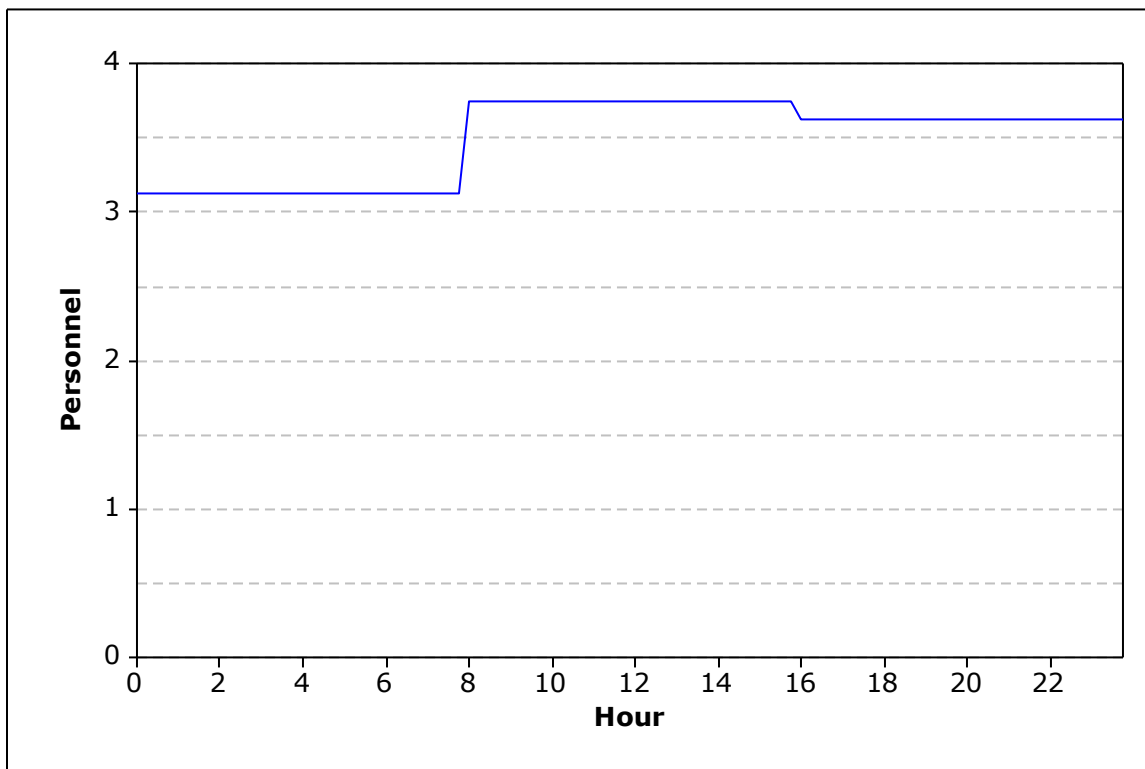


Figure 13. Deployed Officers, Weekdays, August 2010

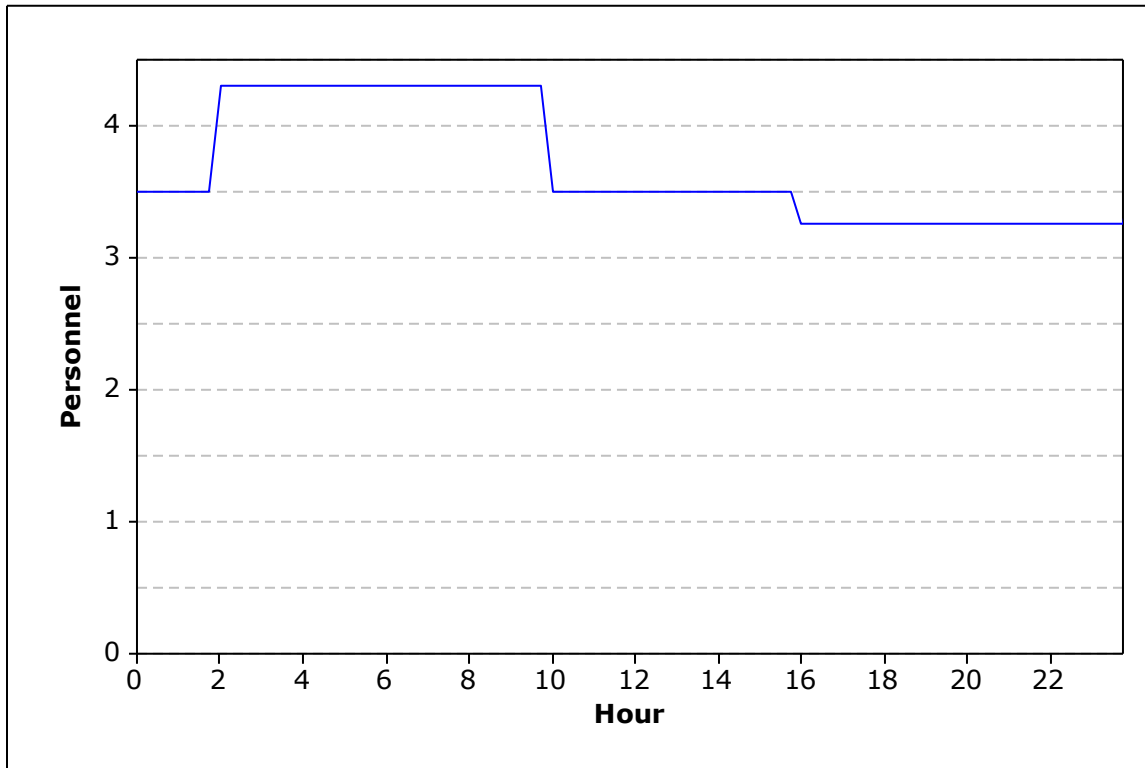
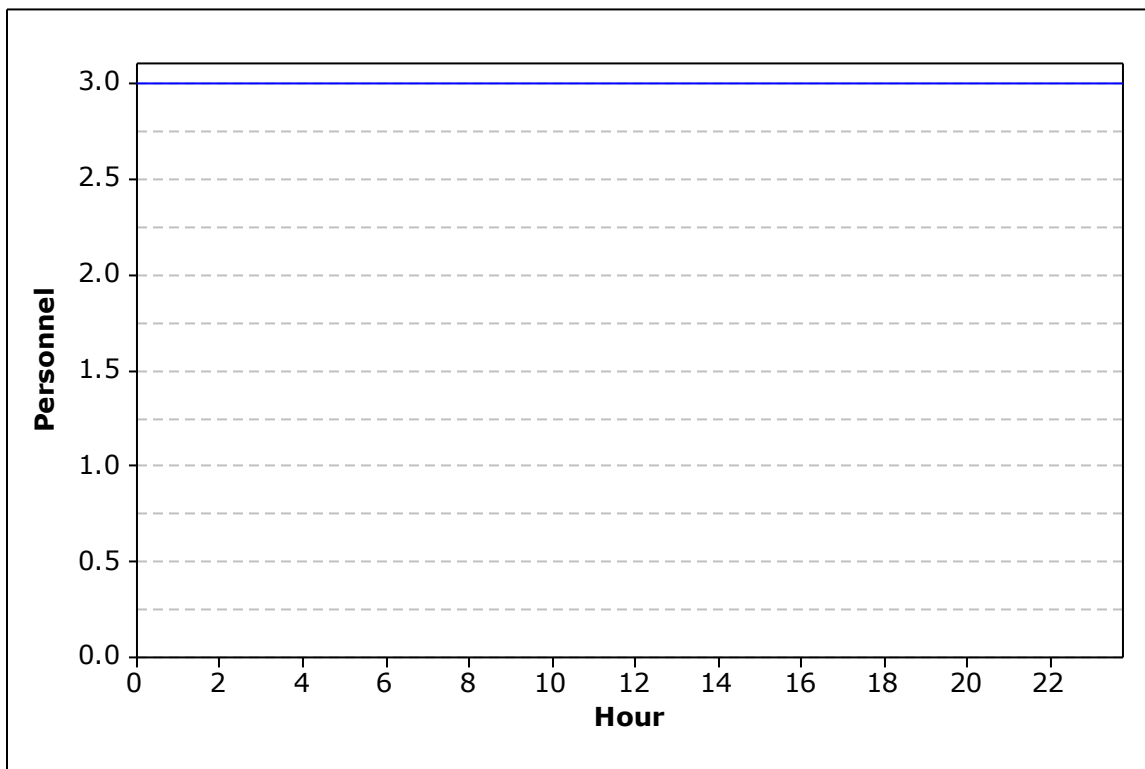


Figure 14. Deployed Officers, Weekends, August 2010



Observations:

- For February 2010:
 - The average total deployment was approximately 3.8 officers during the week and 3.5 officers on weekends.
 - Basic deployment varied between 3.2 and 4.5 officers per hour on weekdays, and between 3.1 and 3.8 officers per hour on weekends.
- For August 2010:
 - The average total deployment was approximately 3.7 officers during the week and 3.0 officers on weekends.
 - Basic deployment varied between 3.3 and 4.3 officers per hour on weekdays, and did not vary on weekends.

Figure 15. Deployment and Other-Initiated Workload, Weekdays, February 2010

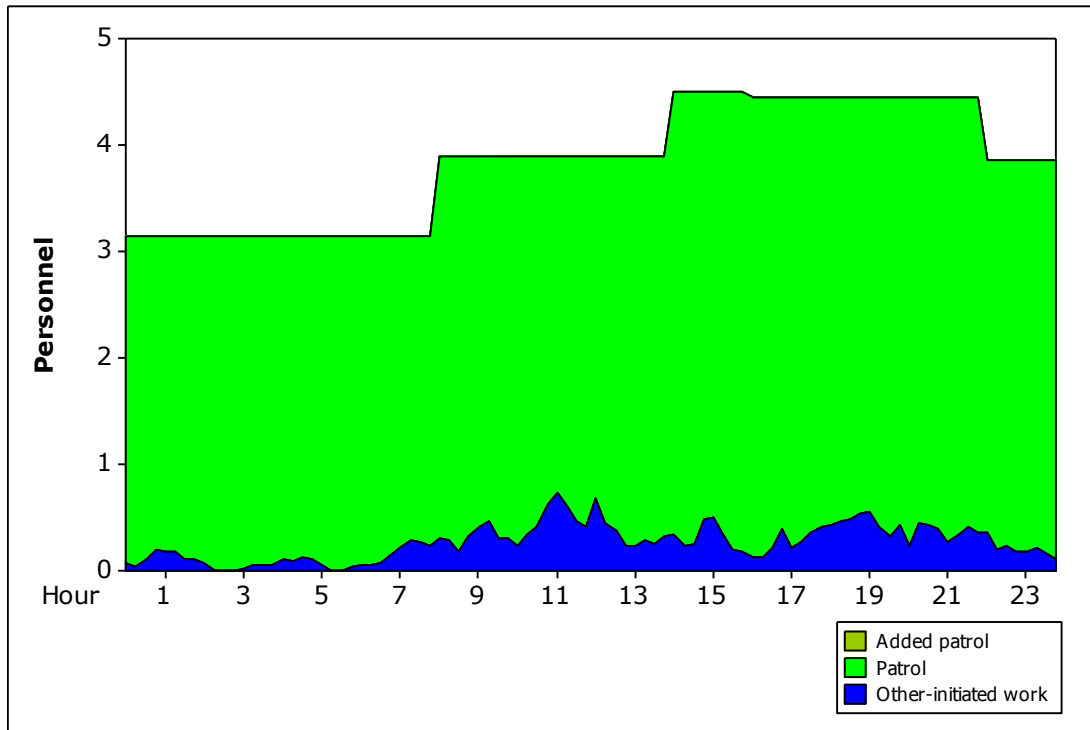


Figure 16. Deployment and Other-Initiated Workload, Weekends, February 2010

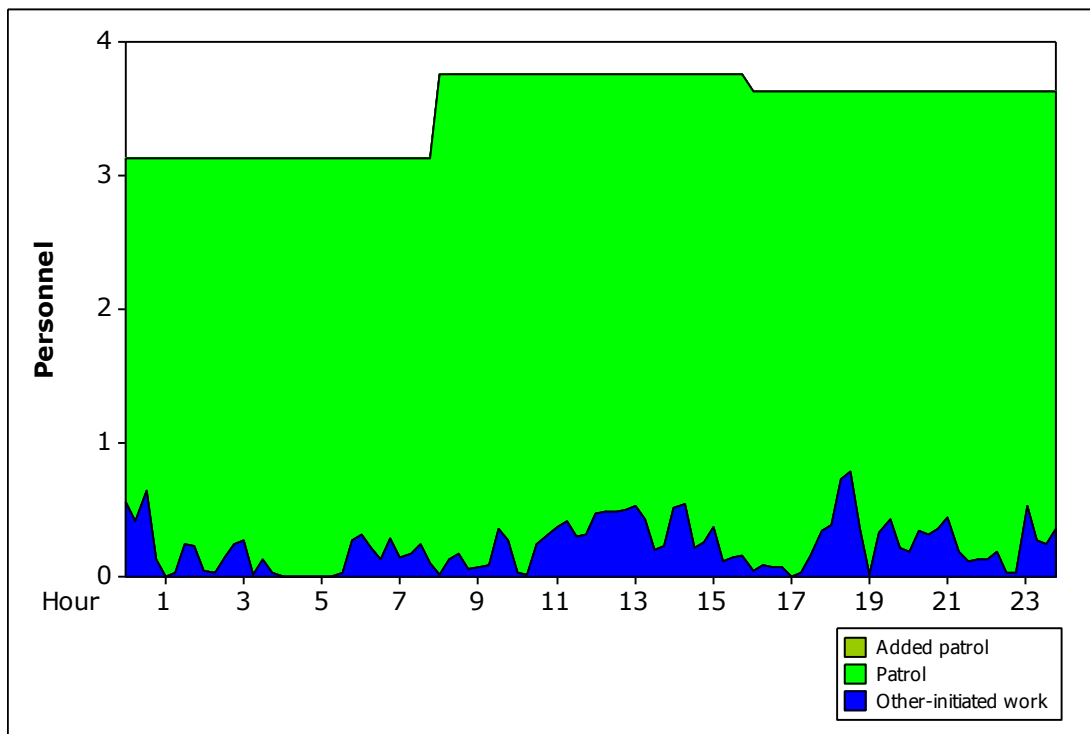


Figure 17. Deployment and Other-Initiated Workload, Weekdays, August 2010

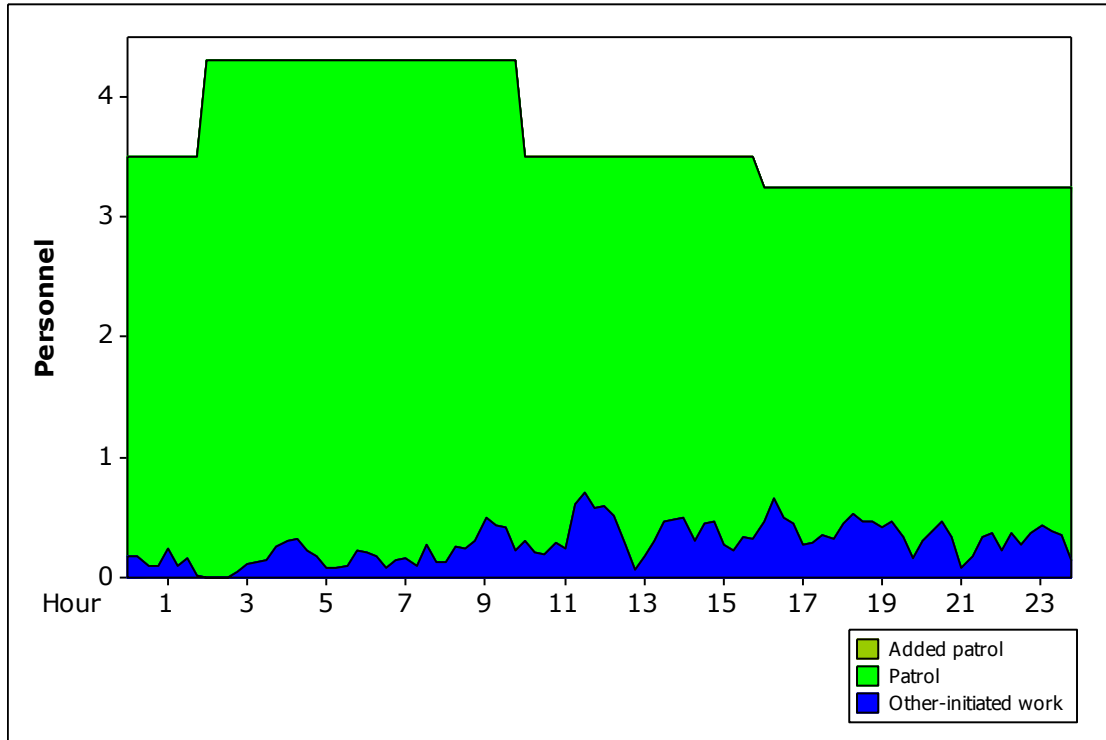
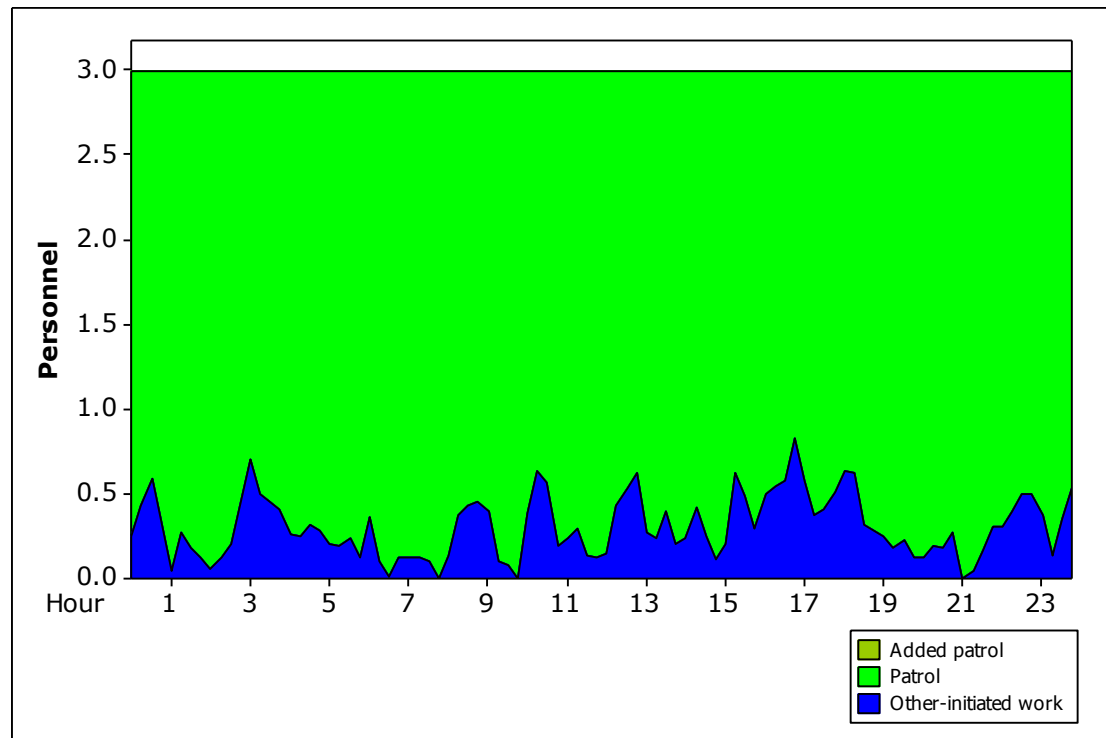


Figure 18. Deployment and Other-Initiated Workload, Weekends, August 2010



Observations:

- For February 2010:
 - Average other-initiated workload was 0.3 officers per hour during the week and 0.2 officers per hour on weekends.
 - This was approximately 7 percent of hourly deployment during the week and 6 percent on weekends.
 - During the week, workload reached a maximum of 19 percent of deployment between 11:00 and 11:15 a.m.
 - On weekends, workload reached a maximum of 22 percent of deployment between 6:30 and 6:45 p.m.

- For August 2010:
 - Average other-initiated workload was 0.3 officers per hour both during the week and on weekends.
 - This was approximately 8 percent of hourly deployment during the week and 10 percent on weekends.
 - During the week, workload reached a maximum of 20 percent of deployment between 4:15 and 4:30 p.m.
 - On weekends, workload reached a maximum of 28 percent of deployment between 4:45 and 5:00 p.m.

Figure 19. Deployment and Main Workload, Weekdays, February 2010

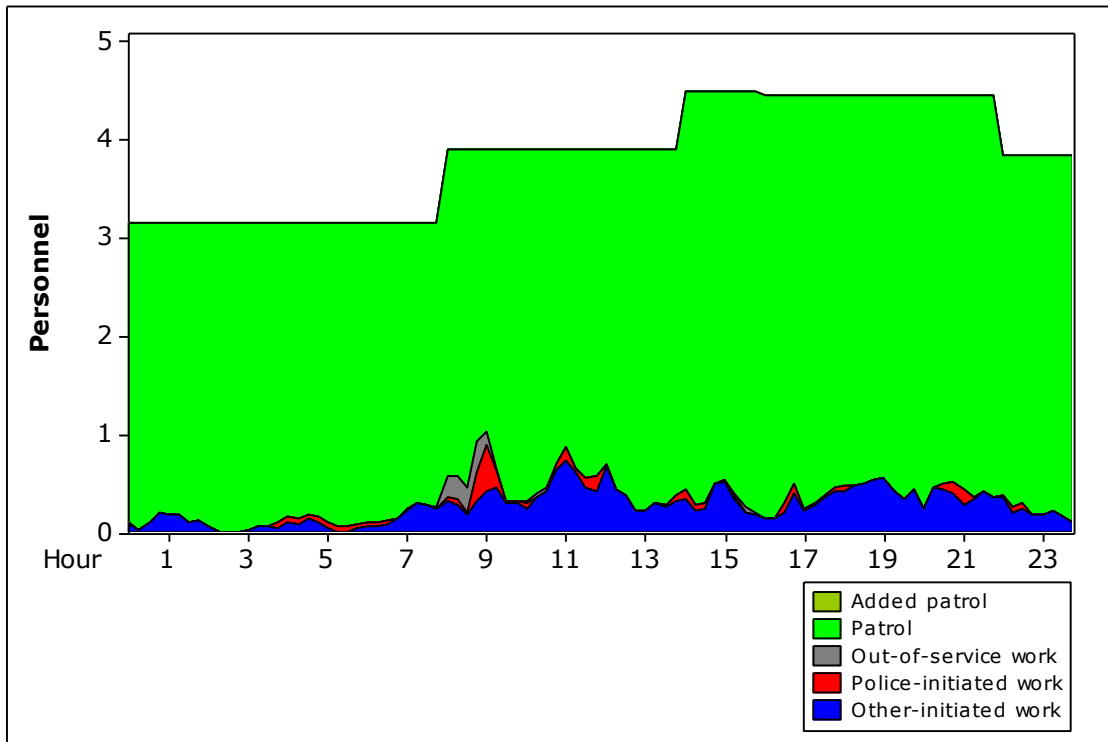


Figure 20. Deployment and Main Workload, Weekends, February 2010

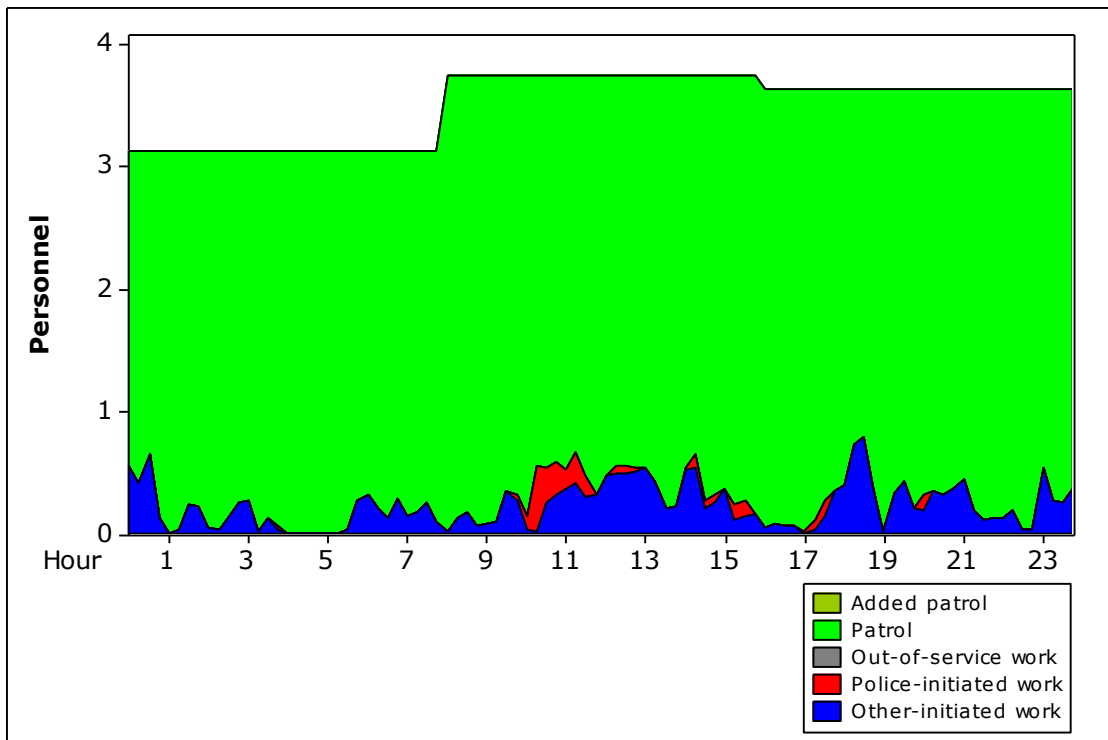


Figure 21. Deployment and Main Workload, Weekdays, August 2010

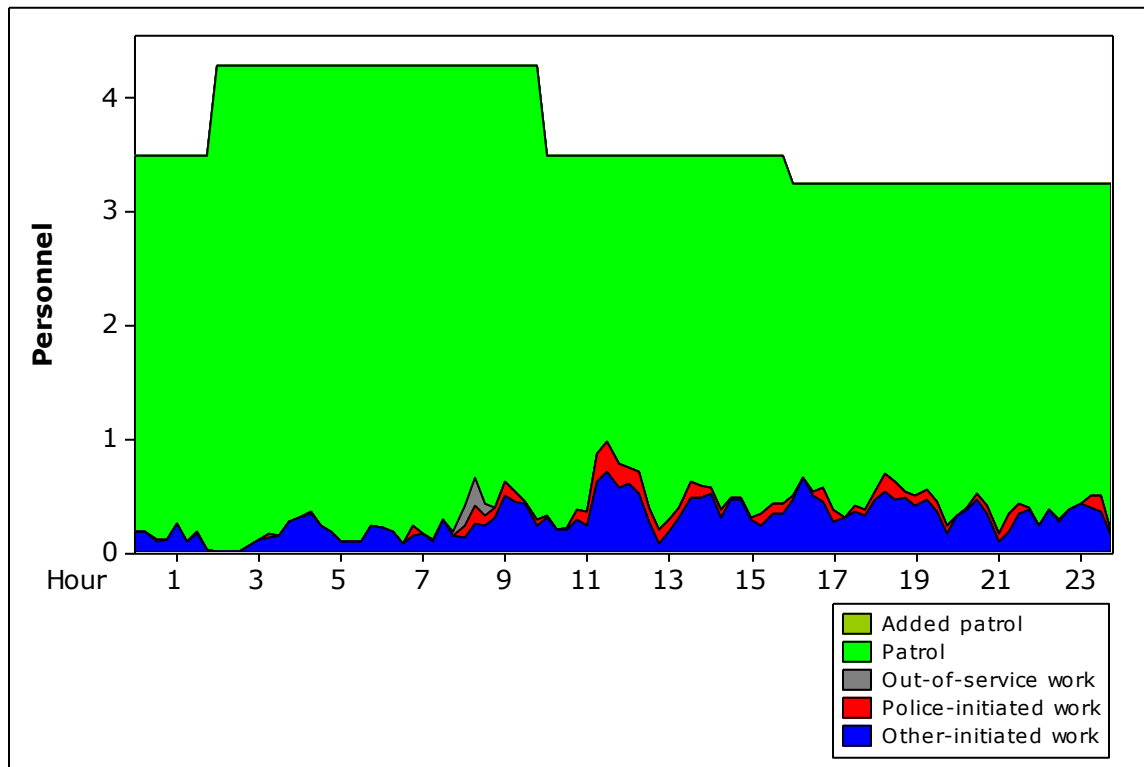
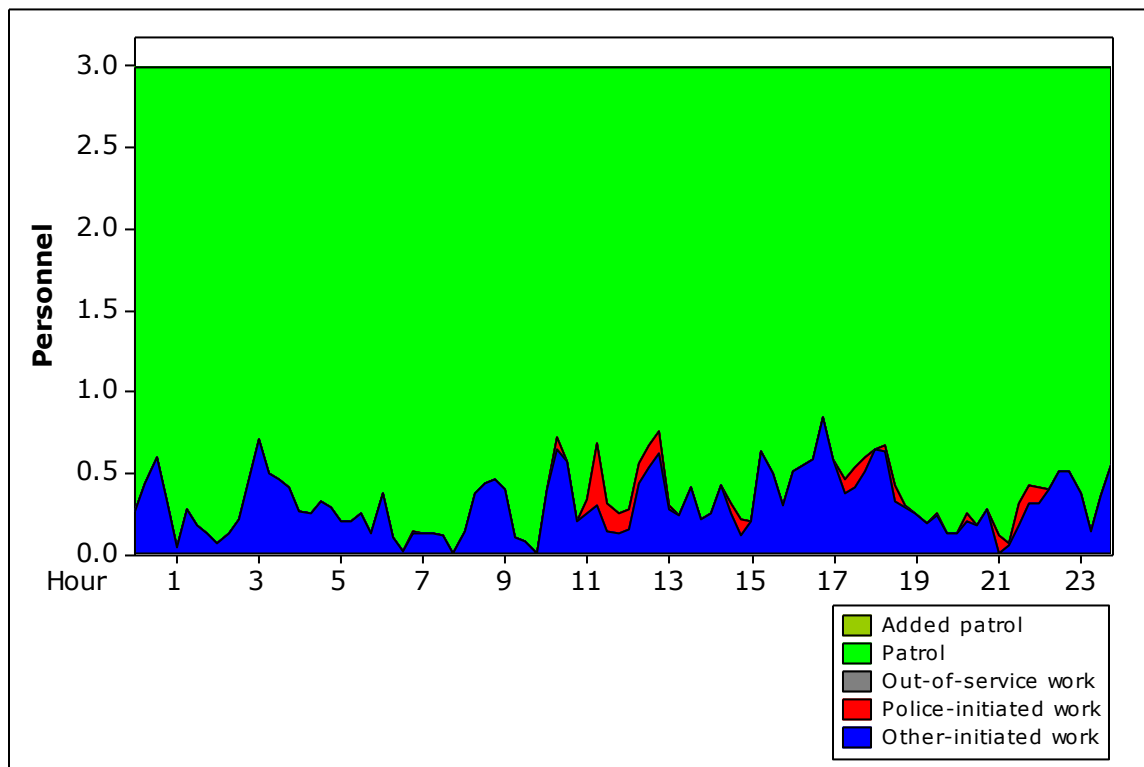


Figure 22. Deployment and Main Workload, Weekends, August 2010



Methodology:

These figures include deployment and workload generated by other-initiated, police-initiated, and out-of-service activities.

Observations:

- For February 2010:
 - Average workload was 0.3 officers per hour during both the week and on weekends.
 - This was approximately 8 percent of hourly deployment during the week and 7 percent on weekends.
 - During the week, workload reached a maximum of 26 percent of deployment between 9:00 and 9:15 a.m.
 - On weekends, workload reached a maximum of 22 percent of deployment between 6:30 and 6:45 p.m.

- For August 2010:
 - Average workload was 0.3 officers per hour during both the week and on weekends.
 - This was approximately 9 percent of hourly deployment during the week and 11 percent on weekends.
 - During the week, workload reached a maximum of 28 percent of deployment between 11:30 and 11:45 p.m.
 - On weekends, workload reached a maximum of 28 percent of deployment between 4:45 and 5:00 p.m.

Figure 23. Deployment and All Workload, Weekdays, February 2010

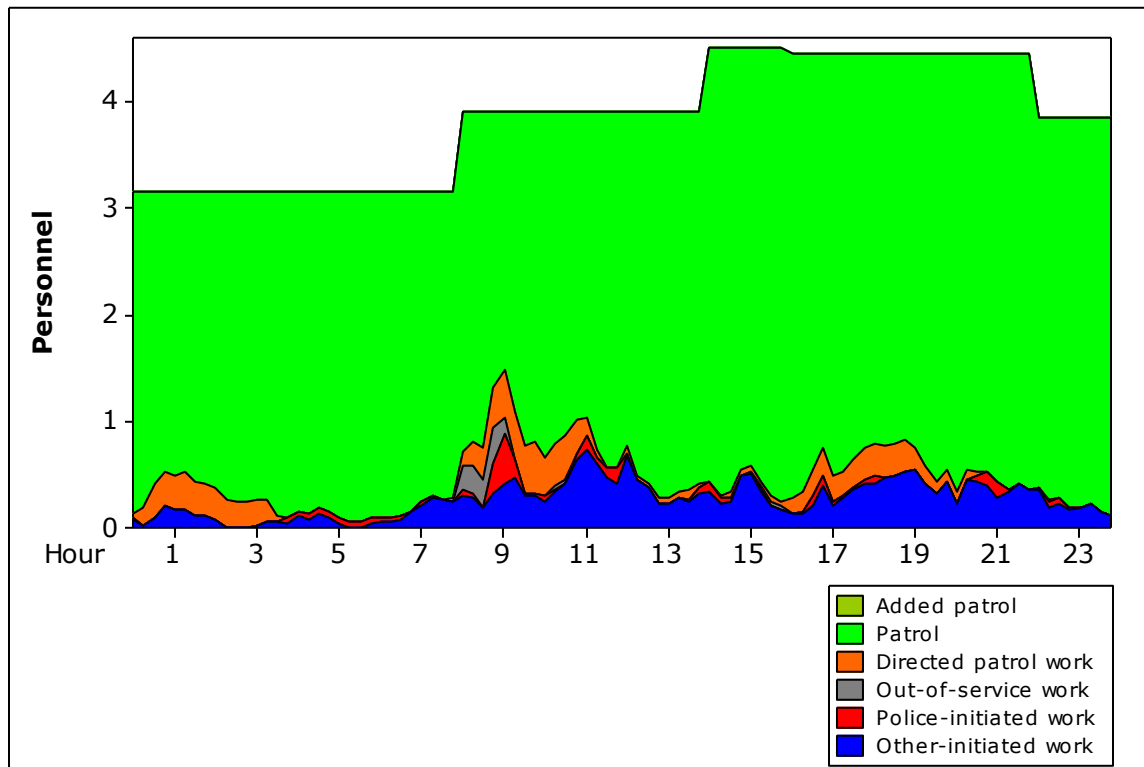


Figure 24. Deployment and All Workload, Weekends, February 2010

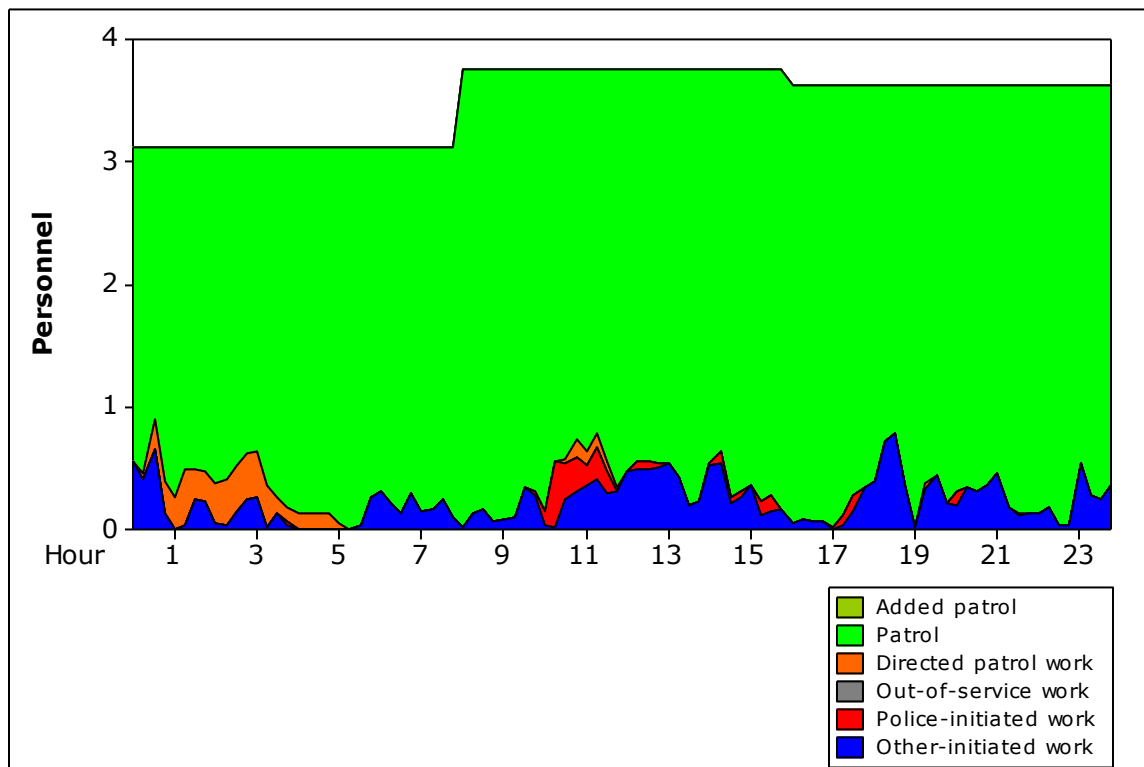


Figure 25. Deployment and All Workload, Weekdays, August 2010

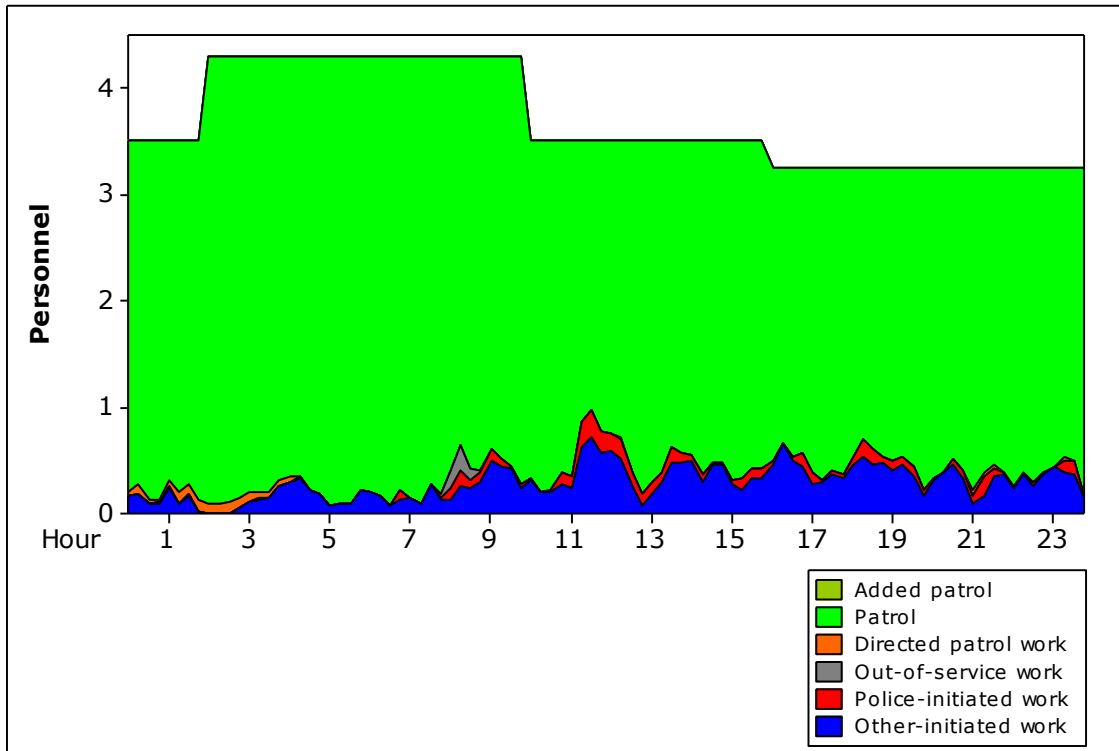
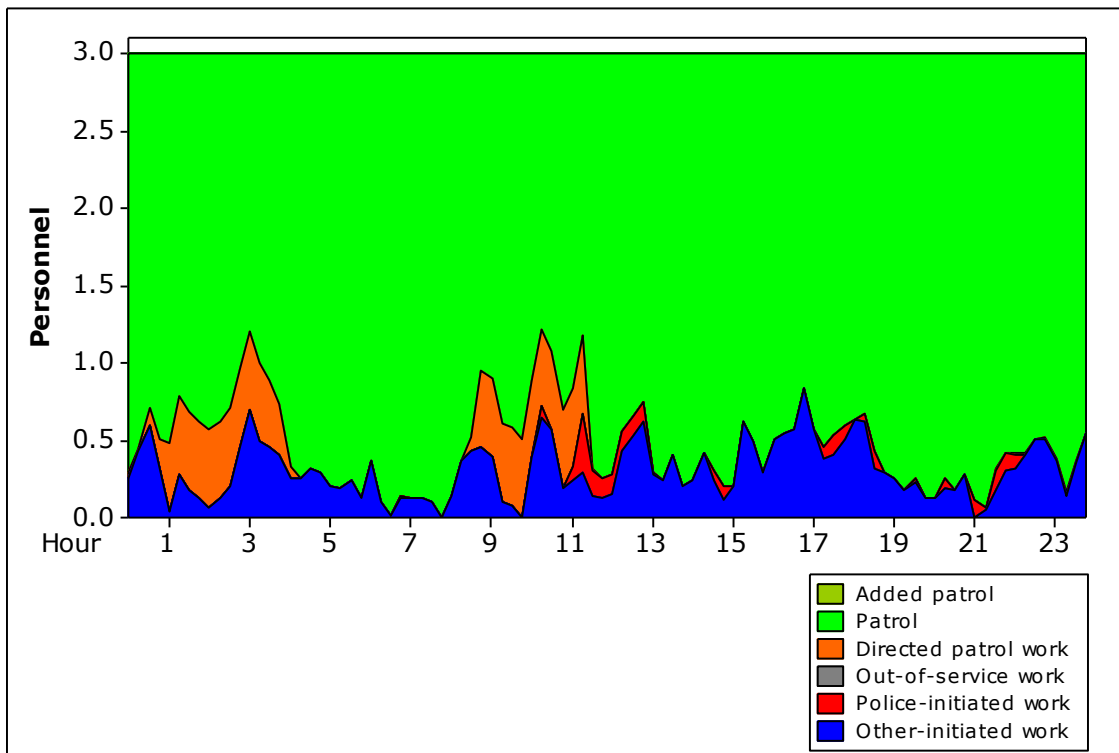


Figure 26. Deployment and All Workload, Weekends, August 2010



Methodology:

These figures include deployment and all workload generated from other-initiated, police-initiated, out-of-service, and directed patrol activities.

Observations:

- We were forced to overestimate directed patrol workload. "Door checks" and "patrol detail" calls are listed near the start of a shift and recorded as continuing uninterrupted throughout the majority of the shift.
- For February 2010:
 - Average workload was 0.4 officers per hour during the week and 0.3 officers per hour on weekends.
 - This was approximately 12 percent of hourly deployment during the week and 9 percent on weekends.
 - During the week, workload reached a maximum of 38 percent of deployment between 9:00 and 9:15 a.m.
 - On weekends, workload reached a maximum of 29 percent of deployment between 12:30 and 12:45 a.m.
- For August 2010:
 - Average workload was 0.4 officers per hour during the week and 0.5 officers per hour on weekends.
 - This was approximately 10 percent of hourly deployment during the week and 15 percent on weekends.
 - During the week, workload reached a maximum of 28 percent of deployment between 11:30 and 11:45 a.m.
 - On weekends, workload reached a maximum of 41 percent of deployment between 10:15 and 10:30 p.m.

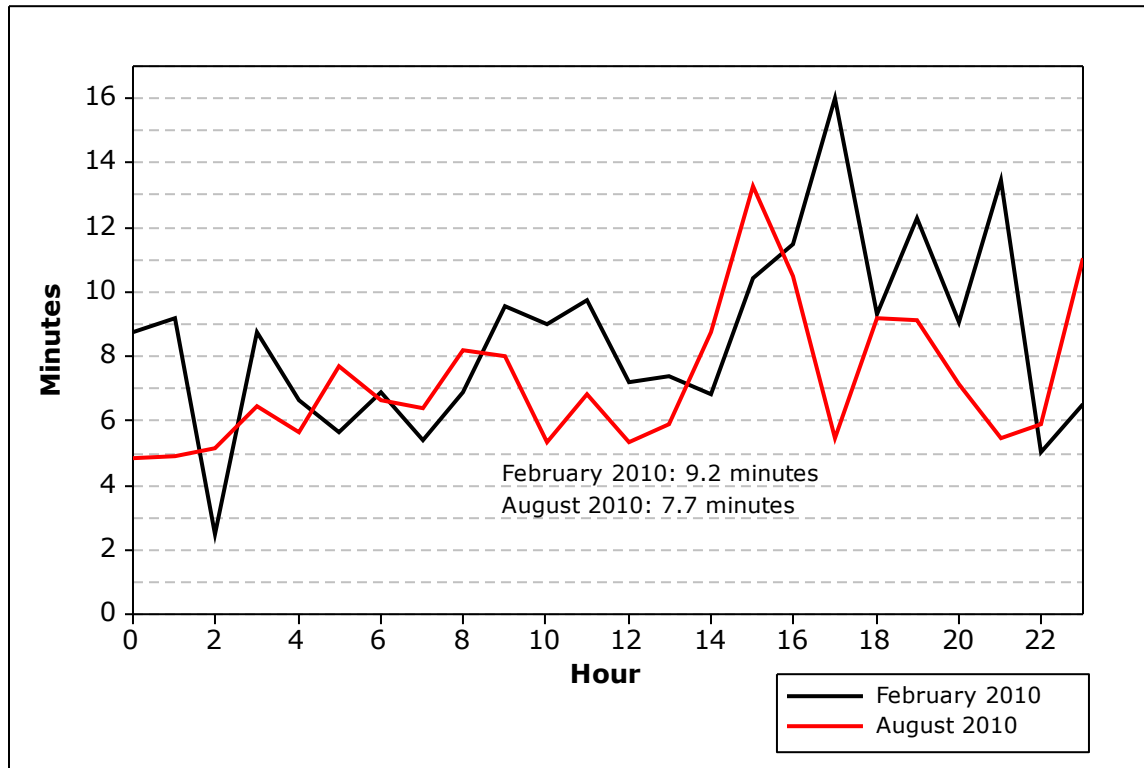
D. Response Times

We analyzed response time to various types of calls, separating the elapsed response time into dispatch and travel times. We begin the discussion with statistics that include all calls combined. We analyzed several types of calls to determine whether response times varied by call type, by season, or by hour of day.

Before presenting the specific figures and tables, we summarize all of the observations. We started with 694 events for winter (February 2010) and 742 events for summer (August 2010). We limited our analysis to other-initiated calls. We also encountered some calls without arrival times; we excluded these from our analysis due to lack of information. This left 347 calls in February and 388 calls in August.

Response time is measured as the difference between when a call is received and when the first unit arrives on scene. This time 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 the first unit is dispatched until the first unit arrives.

Figure 27. Average Response Time, by Hour of Day, for February 2010 and August 2010



Observations:

- Average response times varied significantly by hour of day.
- The overall average was higher in February than in August.
- In February, the longest response times were an average of 16.0 minutes between 5 p.m. and 6 p.m.
- In February, the shortest response times were between 2 a.m. and 3 a.m., with an average response of 2.5 minutes.
- In August, the longest response times were an average of 13.3 minutes between 3 p.m. and 4 p.m.
- In August, the shortest response times were between midnight and 1 a.m., with an average response of 4.8 minutes.

Figure 28. Average Response Times, February 2010

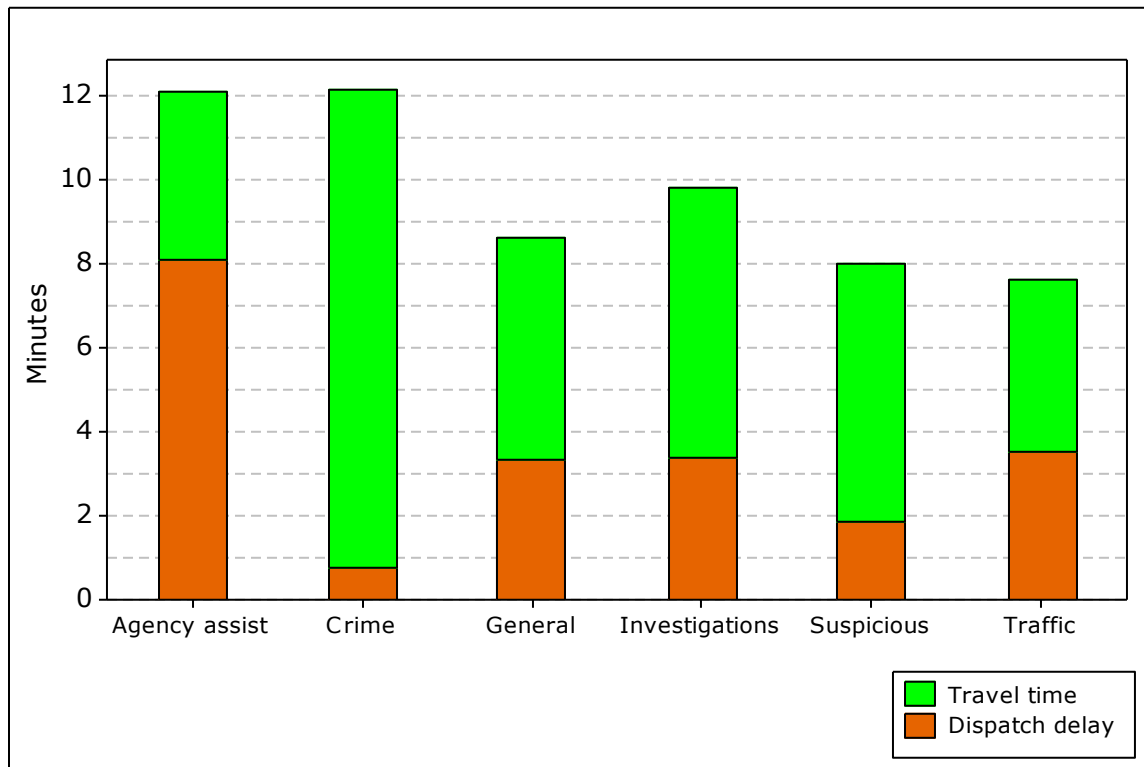


Figure 29. Average Response Times, August 2010

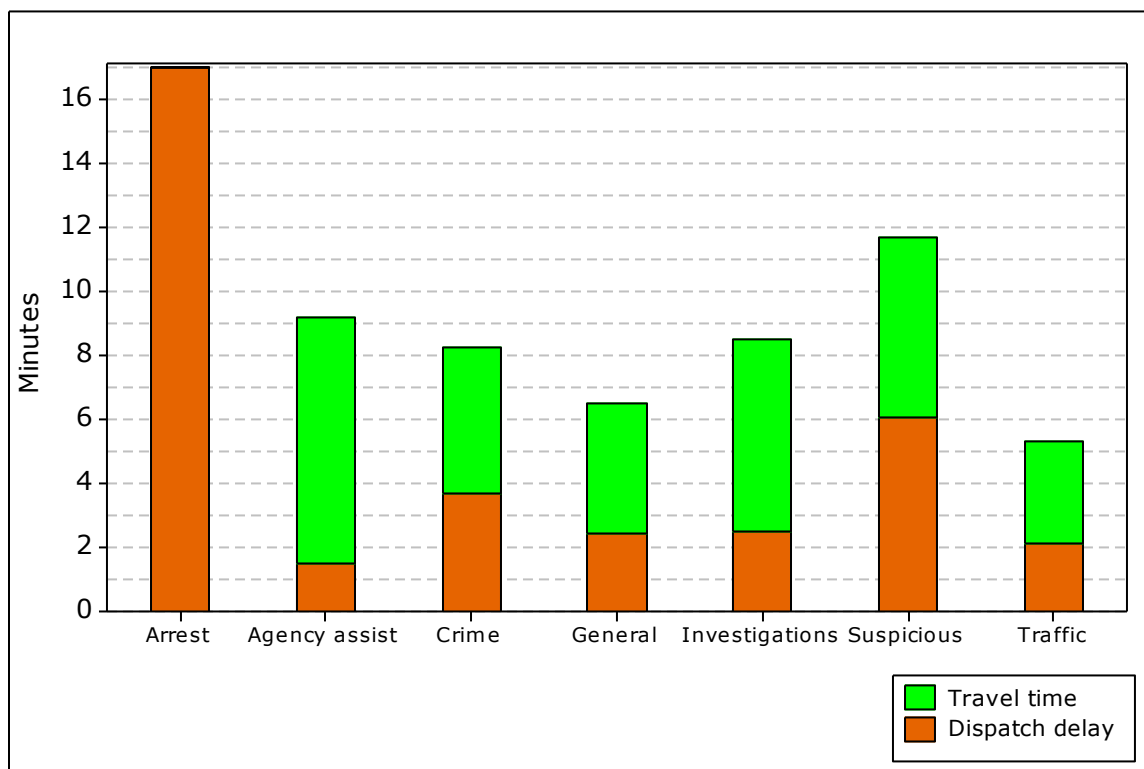


Table 11. Average Response Time Components, by Category

Category	February 2010			August 2010		
	Dispatch	Travel	Response	Dispatch	Travel	Response
Arrest	N/A	N/A	N/A	17.0	0.0	17.0
Agency assist	8.1	4.0	12.1	1.5	7.7	9.2
Crime	0.8	11.4	12.1	3.7	4.6	8.3
General	3.4	5.3	8.6	2.4	4.1	6.5
Investigations	3.4	6.4	9.8	2.5	6.0	8.5
Suspicious	1.9	6.1	8.0	6.0	5.6	11.7
Traffic	3.5	4.1	7.6	2.1	3.2	5.3
Total	3.4	5.8	9.2	2.8	5.0	7.7

Note: The total average is weighted according to the number of calls per category.

Observations:

- Response times varied significantly by call category.
- In February, average response times were as short as 7.6 minutes (for traffic calls) and as long as 12.1 minutes (for crimes and agency assists).
- In August, average response times were as short as 5.3 minutes (for traffic calls) and as long as 11.7 minutes (for suspicious incidents).
There was a single other-initiated arrest call with a valid response time.
- Average response times for crimes were 12.1 minutes during February and 8.3 minutes during August.
- In February, average dispatch delays varied between 0.8 minutes (for crime calls) and 8.1 minutes (for agency assists).
- In August, average dispatch delays varied between 1.5 minutes (for agency assists) and 6.0 minutes (for suspicious incidents).

Table 12. 90th Percentiles for Components, by Category

Category	February 2010			August 2010		
	Dispatch	Travel	Response	Dispatch	Travel	Response
Arrest	N/A	N/A	N/A	17.0	0.0	17.0
Agency assist	48.2	9.9	48.2	6.0	17.4	17.4
Crime	2.0	85.0	85.0	13.6	14.8	17.2
General	5.8	12.0	17.4	5.0	9.1	12.5
Investigations	7.0	13.0	17.0	7.0	13.0	15.7
Suspicious	5.2	13.6	14.0	19.8	12.1	26.4
Traffic	7.3	9.3	17.3	5.4	8.7	13.4
Total	7.0	12.0	17.0	6.0	12.0	15.7

Note: A 90th percentile value of 17.0 minutes means that 90 percent of all calls were responded to in fewer than seventeen minutes. For this reason, the columns for dispatch delay and travel time will not add to total response time.

Observations:

- In February, 90th percentile values for response times were as short as 14.0 minutes (for suspicious incidents) and as long as 85.0 minutes (for crime calls).
- In August, 90th percentile values for response times were as short as 12.5 minutes (for general noncriminal calls) and as long as 26.4 minutes (for suspicious incidents).