

# Public Safety Department Analysis

Walterboro, South Carolina

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## ICMA CENTER FOR PUBLIC SAFETY MANAGEMENT



Submitted by:

ICMA Center for Public Safety Management  
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# ICMA

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## General Information

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### About ICMA

The International City/County Management Association (ICMA) is a 100-year-old nonprofit professional association of local government administrators and managers, with approximately 9,000 members located in 28 countries.

Since its inception in 1914, ICMA has been dedicated to assisting local governments in providing services to their citizens in an efficient and effective manner. Our work spans all of the activities of local government: parks, libraries, recreation, public works, economic development, code enforcement, brownfields, public safety, and a host of other critical areas.

ICMA advances the knowledge of local government best practices across a wide range of platforms, including publications, research, training, and technical assistance. Our work includes both domestic and international activities in partnership with local, state, and federal governments, as well as private foundations. For example, we are involved in a major library research project funded by the Bill & Melinda Gates Foundation and are providing community policing training in El Salvador, Mexico, and Panama with funding from the United States Agency for International Development. We have personnel in Afghanistan helping to build wastewater treatment plants and have teams working with the United States Southern Command (SOUTHCOM) in Central America on conducting assessments and developing training programs for disaster preparedness.

### *ICMA Center for Public Safety Management*

The ICMA Center for Public Safety Management (ICMA/CPSM), one of four centers within ICMA's U.S. Programs Division, provides support to local governments in the areas of police, fire, emergency medical services (EMS), emergency management, and homeland security. In addition to providing technical assistance in these areas, we also represent local governments at the federal level and are involved in numerous projects with the U.S. Department of Justice and the U.S. Department of Homeland Security.

ICMA/CPSM is also involved in police and fire chief selection, assisting local governments in identifying these critical managers through original research, the identification of core competencies of police and fire managers, and assessment center resources.

Our local government technical assistance includes workload and deployment analysis, using operations research techniques and credentialed experts to identify workload and staffing needs and best practices. We have conducted approximately 140 such studies in 90 communities ranging in size from 8,000 population (Boone, Iowa) to 800,000 population (Indianapolis, Indiana).

Thomas Wiczorek is the Director of the Center for Public Safety Management. Leonard Matarese is the Director of Research & Project Development.

## Methodology

The ICMA Center for Public Safety Management team follows a standardized approach to conducting analyses of fire, police, and other departments involved in providing services to the public. We have developed this approach by combining the experience sets of dozens of subject matter experts in the areas of police, fire, and EMS. Our collective team has several hundred years of experience leading and managing public safety agencies, and conducting research in these areas for cities in and beyond the United States.

The reports generated by the operations and data analysis team are based upon key performance indicators that have been identified in standards and safety regulations and by special interest groups such as the International Association of Fire Chiefs (IAFC), the International Association of Fire Fighters (IAFF), the International Association of Chiefs of Police, International Police Association, and the Association of Public-Safety Communication Officials International, and through ICMA's Center for Performance Measurement. These performance measures have been developed following decades of research and are applicable in all communities. For this reason, the data yield similar reporting formats, but each community's data are analyzed on an individual basis by the ICMA specialists and represent the unique information for that community.

The ICMA team begins most projects by extracting calls for service and raw data from a public safety agency's computer-aided dispatch system. The data are sorted and analyzed for comparison with nationally developed performance indicators. These performance indicators (e.g., response times, workload by time, multiple-unit dispatching) are valuable measures of agency performance regardless of departmental size. The findings are shown in tables and graphs organized in a logical format. Despite the size and complexity of the documents, a consistent approach to structuring the findings allows for simple, clean reporting. The categories for the performance indicators and the overall structure of the data and documents follow a standard format, but the data and recommendations are unique to the organization under scrutiny.

The team conducts an operational review in conjunction with the data analysis. The performance indicators serve as the basis for the operational review. The review process follows a standardized approach comparable to that of national accreditation agencies. Before the arrival of an on-site team, agencies are asked to provide the team with key operational documents (policies and procedures, asset lists, etc.). The team visits each city to interview fire agency management and supervisory personnel, rank-and-file officers, and local government staff.

The information collected during the site visits and through data analysis results in a set of observations and recommendations that highlight the strengths, weaknesses, and opportunities of—and threats to—the organizations and operations under review. To generate recommendations, the team reviews operational documents; interviews key stakeholders; observes physical facilities; and reviews relevant literature, statutes and regulations, industry standards, and other information and/or materials specifically included in a project's scope of work.

The standardized approach ensures that the ICMA Center for Public Safety Management measures and observes all of the critical components of an agency, which in turn provides substance to benchmark against localities with similar profiles. Although agencies may vary in size, priorities,

and challenges, there are basic commonalities that enable comparison. The approach also enables the team to identify best practices and innovative approaches.

In general, the standardized approach adopts the principles of the scientific method: We ask questions and request documentation upon project start-up; confirm accuracy of information received; deploy operations and data analysis teams to research each unique environment; perform data modeling; share preliminary findings with the jurisdiction; assess inconsistencies reported by client jurisdictions; follow up on areas of concern; and communicate our results in a formal written report.

## **ICMA/CPSM Project Contributors**

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## Executive Summary

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ICMA was retained by the city of Walterboro, South Carolina, to complete an operational analysis of the city's public safety department. The analysis is intended to provide the city with an unbiased review of services provided by the Walterboro Public Safety Department (hereinafter, WPSD). This report is the result of this analysis and is accompanied by recommendations for ways to improve efficiencies and effectiveness in the delivery of services. The report also provides some benchmarking of the department's existing service delivery performance. Benchmark performance information can be found in the data analysis section of the report.

To begin the review, the project staff asked the city for certain documents, data, and information. The project staff used this information/data to familiarize themselves with the department's structure, assets, and operations. The information provided was also used in conjunction with the performance data collected to determine the existing performance of the WPSD.

The ICMA project management staff conducted two site visits consisting of ten person days for the purpose of observing department and agency-connected supportive operations, interviewing key city and public safety department staff, and reviewing preliminary data and operations. Follow-up telephone calls were also conducted between ICMA project management staff and city staff so that ICMA staff could affirm the project information and elicit further discussion regarding this operational analysis.

The ICMA team, while reviewing information and discussing operations with department members, always seeks first to understand the operations, then to identify ways the department can improve efficiency, effectiveness, and safety for both its members as well as the community it serves. ICMA found that the city of Walterboro is not unique, in that it seeks to create a more efficient delivery of fire and police services within existing financial resources.

ICMA found that there are major improvements that should be made in the manner in which public safety services are delivered in Walterboro. Critical areas the ICMA team identified that need improvement and that resulted in our recommendations are: significant human resource administrative and process deficiencies need to be corrected; the department has not completed a comprehensive strategic plan or community risk assessment; the department has a limited performance measurement system in place; there are administrative and operational inefficiencies that reduce the effectiveness of the public safety officer concept; the agency lacks current and succinct agency policies and procedures; and there are a number of agency-wide administrative and operational deficiencies and areas we identified that need improvement.

We find that this agency is in urgent need of highly skilled leadership, experienced in the public safety concept, who can instill a vision in the agency built around a deep commitment to protect the citizens of the city. Members of the agency working hard to meet the needs of the community do not receive sufficient support or guidance. There is an absence of standard processes for recruitment, promotion, discipline, or recognition of service or exemplary performance. The agency fails to train its personnel adequately. In total, these shortcomings send a very poor message to the staff sworn to protect the community. Even the physical conditions these staff member work in are

lacking. For example, the door to the apparatus bays badly needs replacement and has for an extended period. Our team members were struck by the fact that there is not even a sign at the entrance to the public safety headquarters to identify the department correctly. This kind of lack of attention to detail sends a less than positive message to the staff members about the commitment of the city to the department.

We are making 54 principal recommendations, which follow, and which are also listed throughout the report. We could have made many more recommendations, but have limited them to the most critical issues the agency faces. The recommendations are based on best practices derived from the National Fire Protection Association (NFPA), the Center for Public Safety Excellence (CPSE), ICMA, the U.S. Fire Administration, the International Association of Chiefs of Police (IACP), the International Association of Fire Chiefs (IAFC), the International Association of Emergency Managers (IAEM), and the Federal Emergency Management Agency (FEMA), to name a few, as well as the knowledge of ICMA reviewers.

## Recommendations:

1. The city should adopt the proposed Walterboro Public Safety Department organizational chart. This reorganization will include adding civilian personnel to assume some duties not currently being performed as well as transferring some duties now being performed by sworn personnel. The proposed table of organization adds four positions to the current staffing level (one sworn and three civilian positions). We understand that the upcoming FY budget does not fund these additional positions, but we do not view that as a problem. There are numerous vacancies within the agency and the reorganization will take at least a year to implement.
2. Develop the proposed functional table of the organization to accompany the new formal Walterboro Public Safety Department organizational chart.
3. Move all patrol / suppression personnel into teams working the 12-hour shift schedule.
4. The city should retain the services of a professional human resources expert to assist in the development and implementation of a meaningful, validated, and equitable human resources system.
5. The City Council should review its decision to withdraw from adopting policies and procedures governing the human resources management of the WPSD. Absent the council's adoption of policies there should be a clear direction as to who should promulgate such policies.
6. The city should establish a meaningful and validated recruitment and selection process that is administered by the new position of Professional Standards Officer.
7. The city should establish an integrated system of field training, annual evaluations, in-service training, promotions, and discipline.
8. The department should utilize a position control list system that is reported to the city council on a regular basis. Title / job descriptions should be promulgated for each position in the agency and adopted by the city council

9. Develop and implement a communication model for the organization that ensures an effective conduit of clear and productive communication throughout the entire WPSD.
10. Adopt a time allocation model; implement and monitor time allocation to ensure effective use of officer and staff time as it relates to achieving the organizational mission and to each individual's position in the organization.
11. Establish a clear chain of command for the department from the rank of firefighter/public safety officer to the director, utilizing basic principles of unity of command and span of control. Each employee should answer to one supervisor and each officer (supervisor) should clearly understand their role in the organization, their responsibilities, and the level of leadership and accountability that comes with their position.
12. Develop and implement a comprehensive strategic plan.
13. Incorporate measurable and obtainable goals and objectives into strategic and comprehensive planning documents as well as annual and long-range fiscal documents.
14. Develop and implement a fire performance measure reporting system that expands the type of measurement the WPSD uses.
15. Develop performance measures for each departmental activity, and link these to strategic planning documents and fiscal / budget documents.
16. The department should consider the deployment of nontraditional vehicles that will serve both law enforcement and fire suppression capabilities. ICMA further recommends the department vigorously pursue cross-training of all uniform and command staff to ensure a fully implemented public safety department.
17. It is recommended that the six general performance measures of a police agency be utilized to track whether or not the department's mission is being achieved, and it is further recommended that the performance measures be used to monitor the WPSD's efforts and to hold the department accountable for success in these areas.
18. The WPSD should work closely with the Solicitor's Office to identify the root causes of a seemingly high dismissal rate and develop the policies, training, and management processes to improve.
19. Supplement statutory criteria for case assignment with "solvability" factors. Procedure 04-026 outlines solvability factors in Section IV. These factors (named, identity, address/location of suspect, traceable/identifiable evidence, etc.) should be the first-order criteria for assigning a case for investigation. Essentially, when patrol units conduct a preliminary investigation that leads to tangible information implicating a suspect, but not a summary arrest, the case should be forwarded for follow-up investigation.
20. Assign the ID lieutenant to review all cases and determine which ones, based on solvability factors, get assigned for follow-up, and which ones get closed and/or forwarded to patrol.
21. The Patrol / Suppression commander should be the point-person between the ID lieutenant and patrol units for case follow-up. At the time of this report several dozen cases from 2012 that were forwarded to patrol were still open. A more thorough system of oversight and

case management involving the patrol commander would ensure a more timely resolution to cases assigned to patrol.

22. The WPSD needs to make a greater investment in technology with respect to criminal investigations. For example, inspection of the case files generated by the ID reveals a meticulous and well-ordered system for case management. These case files, however, are completely paper-based and stored in a stand-up file cabinet. Retrieval and searching these files is cumbersome and needs to be automated. All case files should be digitized and stored electronically. This will undoubtedly enhance the current process of investigations in the WPSD.
23. The clearance rates demonstrate an effective investigations process. However, these data were calculated by ICMA and are not used regularly by the WPSD. Clearance rate is an important benchmark to evaluate the performance of the department as a whole and the ID specifically, but the information is largely ignored. Clearance rates should be tracked more rigorously, and should be used to assess the performance of individual investigators. Regular and frequent evaluation of the number of cases assigned to investigators and the outcome of those cases should be part of the regular management of the investigative function in the WPSD.
24. A more robust system of criminal intelligence and crime analysis needs to be embraced. The ID is performing well, but the approach is almost entirely reactive. The information collected day-to-day by the department needs to be analyzed and turned into actionable intelligence to apprehend criminals and reduce crime. The process in place currently is largely informal. In a small community this approach is adequate, but with a deliberate effort to mine data and develop intelligence the WPSD will become more effective. One member of the department should be designated as the Intelligence Officer and be provided the technology, training, and support to develop criminal intelligence.
25. The ID should develop a "career criminal" monitoring system. There were numerous references made to "small bands" of predicate offenders committing a large amount of crime in the community. The ID should develop a list of these individuals and check them regularly for outstanding warrants, pay regular visits to their places of work or residence, and petition the Solicitor for enhanced prosecution in the event these individuals are arrested and appear in court on any offense.
26. 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 a minimum, the department should periodically review procedures related to the proper handling of emotionally disturbed persons, field investigations (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. The training officer should solicit potential topics from civilian and uniformed members of the department. All lessons delivered should utilize a standardized lesson plan with distinct learning goals and objectives. All lesson plans and instructional materials should be maintained permanently.
27. The department should make a concerted effort to combine, integrate, and review training lessons whenever possible. Traditional lectures should be supplemented with interactive,

tactical role-play scenarios. For example, rather than scheduling and delivering three distinct training sessions on the topics of: 1) the handling of emotionally disturbed persons; 2) vehicle stops; and 3) the use of less than lethal force, one creative and well-designed training session can address all three topics and require officers to review prior lessons and demonstrate acquired skills, while learning new information. In other words, the department should look to tie together training topics that are logically related to one another.

28. The department should provide periodic executive development (i.e., supervisors' training) to its supervisors of every rank. This could be provided either "in-house" or externally (e.g., via a regional police academy or commercial vendors). Potential topics should include review of the proper way to complete performance evaluations of subordinates.
29. The training officer should continue to 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.
30. The department should designate, train, and support one senior member of the department on each patrol team to serve as primary field training officer (FTO). These individuals would work with the department's training corporal to review and revise the department's field training program and procedures.
31. All roll call training topics should be recorded and any related training materials should be maintained properly.
32. The recruiting function should be overseen by the professional standards officer.
33. A minimum of two fully trained public safety officers should be scheduled during each law enforcement shift to augment fire suppression capabilities.
34. Recruitment and retention of volunteer members for fire suppression should be a priority, and should have a focus on expanding capacity in fire suppression and ancillary program activities. This responsibility should be assigned to the Professional Standards Officer.
35. Utilize the quint apparatus as an initial response apparatus from station 1 to gain maximum efficiencies and effectiveness on fire suppression responses.
36. Develop and implement a heavy fire apparatus replacement program that includes NFPA 1901 as a benchmark. This plan should also consider the inclusion of quick response vehicles, and what heavy fire apparatus will not have to be replaced as the result of this model change.
37. ICMA strongly recommends that the WPSD implement a program to cross-train in fire suppression all uniform members of the department's law enforcement component. ICMA further recommends that all fire staff members be encouraged to cross-train in law enforcement to be utilized as available capacity to back-fill law enforcement shift vacancies, and to be available as surge capacity in law enforcement as needed.
38. ICMA strongly recommends the department consider the deployment of nontraditional quick response vehicles in fire station 2 and 3 response areas and which will serve both law enforcement and fire suppression capabilities.

39. ICMA strongly recommends that the department take steps to ensure that all cross-trained public safety officers fully accept the responsibility of the fire suppression component, and be held accountable for this position requirement.
40. ICMA further recommends that minimum staffing for police road patrol be three officers plus one supervisor (sergeant or corporal), and that minimum staffing for fire suppression be two and be located at station 1.
41. Conduct a community risk assessment and continually analyze / utilize the results in the planning of future staffing and deployment of fire services and apparatus needs.
42. Develop and implement a program utilizing citizens from the community (Champions) to assist in managing community risk. One way to implement this process is to divide the city into three geographical divisions based upon the locations of the three current fire districts. Each district would concentrate on operations, prevention, training, and most importantly, community groups. A designated fire staff member would be a community group or team leader. Groups/ teams would meet quarterly at each station to review that station's call patterns and risk factors.
43. The South Carolina Department of Labor, Licensing and Regulations, Office of the State Fire Marshal certifies Local Resident Fire Marshals/Inspectors. It is recommended that the current Inspector be enrolled in this program.
44. Establish a comprehensive annual inspection database and inspection plan based upon risk-hazard-analysis and state mandates. This planning should include inspections performed by the fire inspector and any fire safety inspections performed by fire suppression personnel.
45. All fire marshal inspection orders (Notice of Order) should include the best practice of posting the appropriate code violation that mandates correction for each violation.
46. The WPSD should evaluate and choose a software package and field instruments to perform all inspections (fire, building, zoning etc.). This investment will significantly reduce inspection time and increase productivity and efficiency, provide data for instant reports, and track violations and corrective actions as well as inspections/re-inspections and due dates.
47. Establish a succession program to begin the training process for the next generation of Inspectors. This will ensure that the important institutional knowledge will be preserved.
48. Establish a database to record incident information regarding cause and origin, arson investigation, incident scene preservation, and SLED investigation results.
49. Update department policy 95-021 or develop a new policy that includes SLED notification for suspicious fires, and for fire origin and cause and arson investigation, with specific focus on chain of custody and scene preservation.
50. The city of Walterboro should work with Colleton County and develop and implement a mutual aid agreement with Colleton County Fire-Rescue. The purpose of this agreement is to expand fire and technical rescue/asset response capabilities in the aftermath of a disaster or during large-scale events, and where applicable, assist with day-to-day responses in areas of extended response times for initial and additional responding Walterboro units.

51. Continue expansion of the fire training regimen beyond ISO requirements to include South Carolina fire academy on-line training courses, regular use of the training tower and training grounds to maximize practical skills training, and concentration on team skills and initial fireground operations with minimum staffing.
52. Develop and implement a training record system that is maintained in a database. This system should include certification training as well as WPSD-centric administrative and operational training.
53. Implement quality assurance / improvement measures regarding practical skills through the development and implementation of annual skill competency evaluations.
54. ICMA strongly recommends that the city of Walterboro contract with Colleton County for emergency communications services.

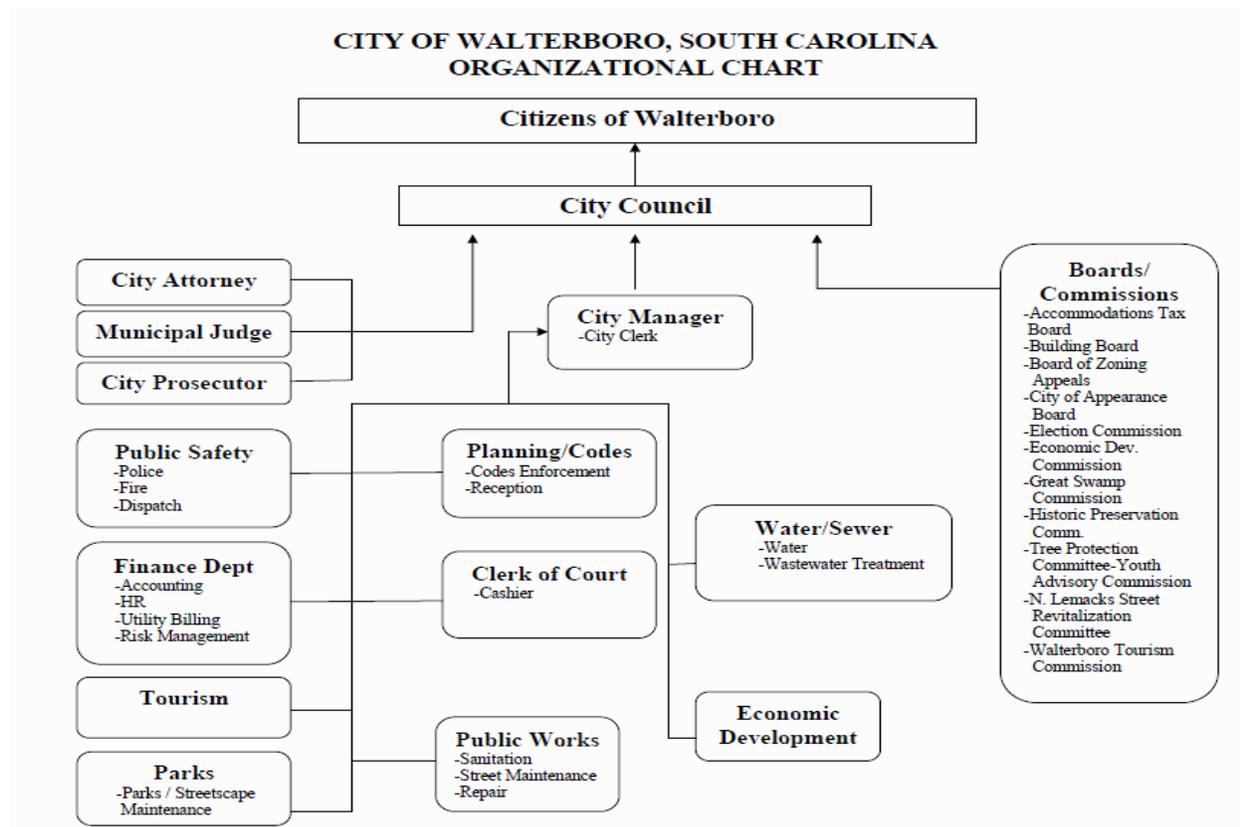
## Governance and Administration

In accordance with South Carolina Code Ann. § 5-13-10 et seq. and Section 2-1 of the City Charter (charter), the city of Walterboro operates under a council-manager form of government.<sup>1</sup> Section 2-2 of the charter establishes that the city council shall be comprised of a mayor and six council members elected at large. Further and pursuant to Section 2-4 of the charter, the mayor and council shall serve four-year staggered terms. As a formal matter of administration of the council, according to the charter the council shall elect a mayor pro-tempore by majority vote of its membership at the first council meeting following a general election of council members.<sup>1</sup>

Section 2-101 of the charter provides that the city manager is the chief executive officer of the administrative branch of the city, and is appointed by the council to administer the affairs of the city other than exceptions identified in the charter.

Figure 1 illustrates the organizational chart for the city of Walterboro, South Carolina.

**Figure 1: City of Walterboro Organizational Chart**



<sup>1</sup> Charter, Code of Ordinances, City of Walterboro, South Carolina.

Section 16-11 of the charter establishes the Walterboro Public Safety Department. The responsibilities of the department include but are not limited to preventing and extinguishing fires, providing emergency medical services, conducting a fire prevention education program, and enforcement and other duties as may be prescribed by the council.

The Walterboro Public Safety Department (WPSD) serves approximately 5,400 residents in 6.7 square miles of suburban land area located in Colleton County, South Carolina. To meet current mission objectives, WPSD operates out of one permanent police facility and three permanent fire stations. As a public safety department, some WPSD employees are cross-trained in both law enforcement and fire suppression. According to the April 2, 2013 organizational chart provided to ICMA, there are forty-six full-time equivalent positions within WPSD. This includes forty uniform positions to include the director and assistant director, one civilian administrative assistant, and five telecommunicator positions. However, when we reviewed the positions in detail we found that forty-nine were funded (see position control list discussion). The city of Walterboro is a class 3-ISO rated community.

**Figure 2: Current City of Walterboro Public Safety Department Organizational Chart**

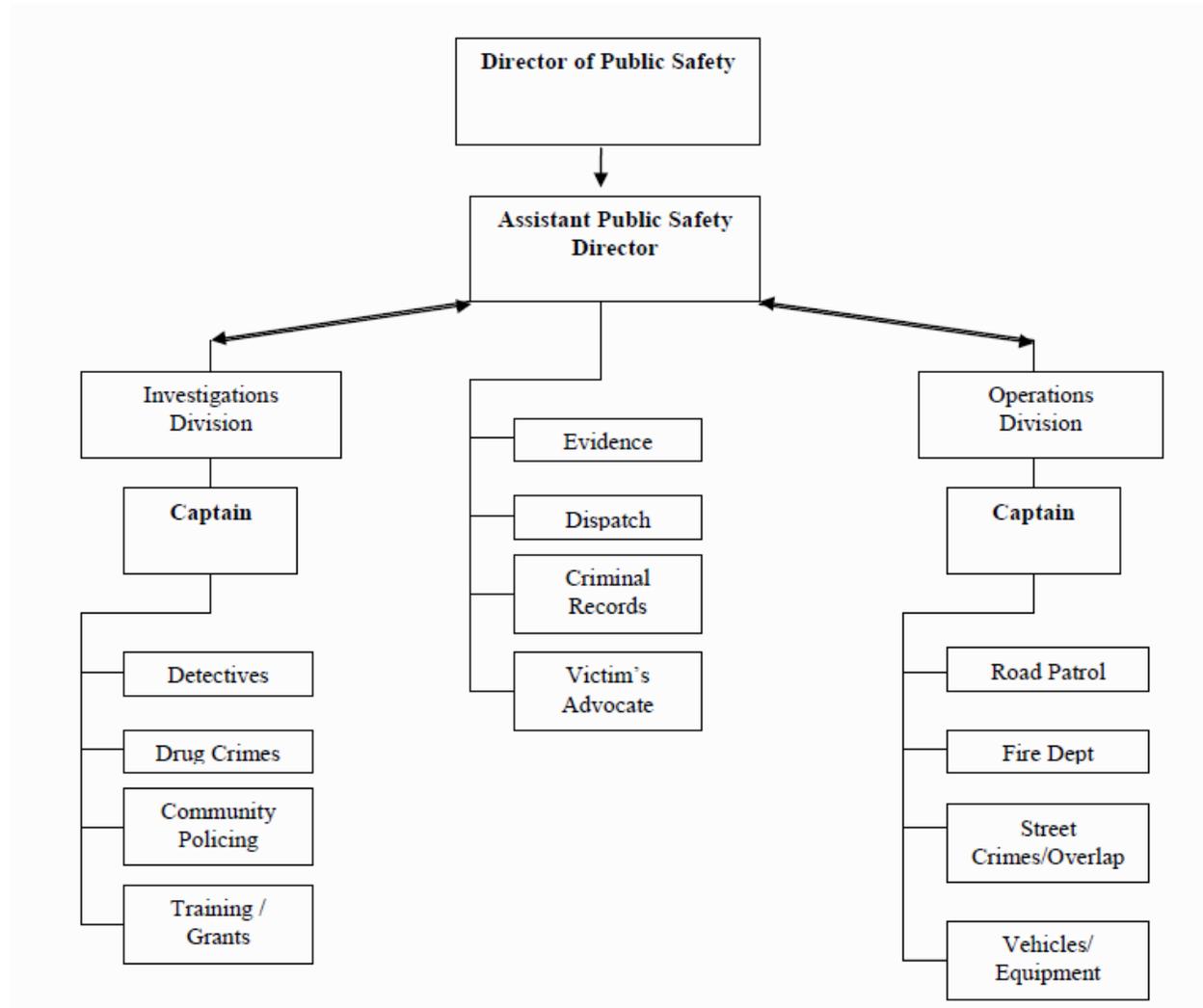
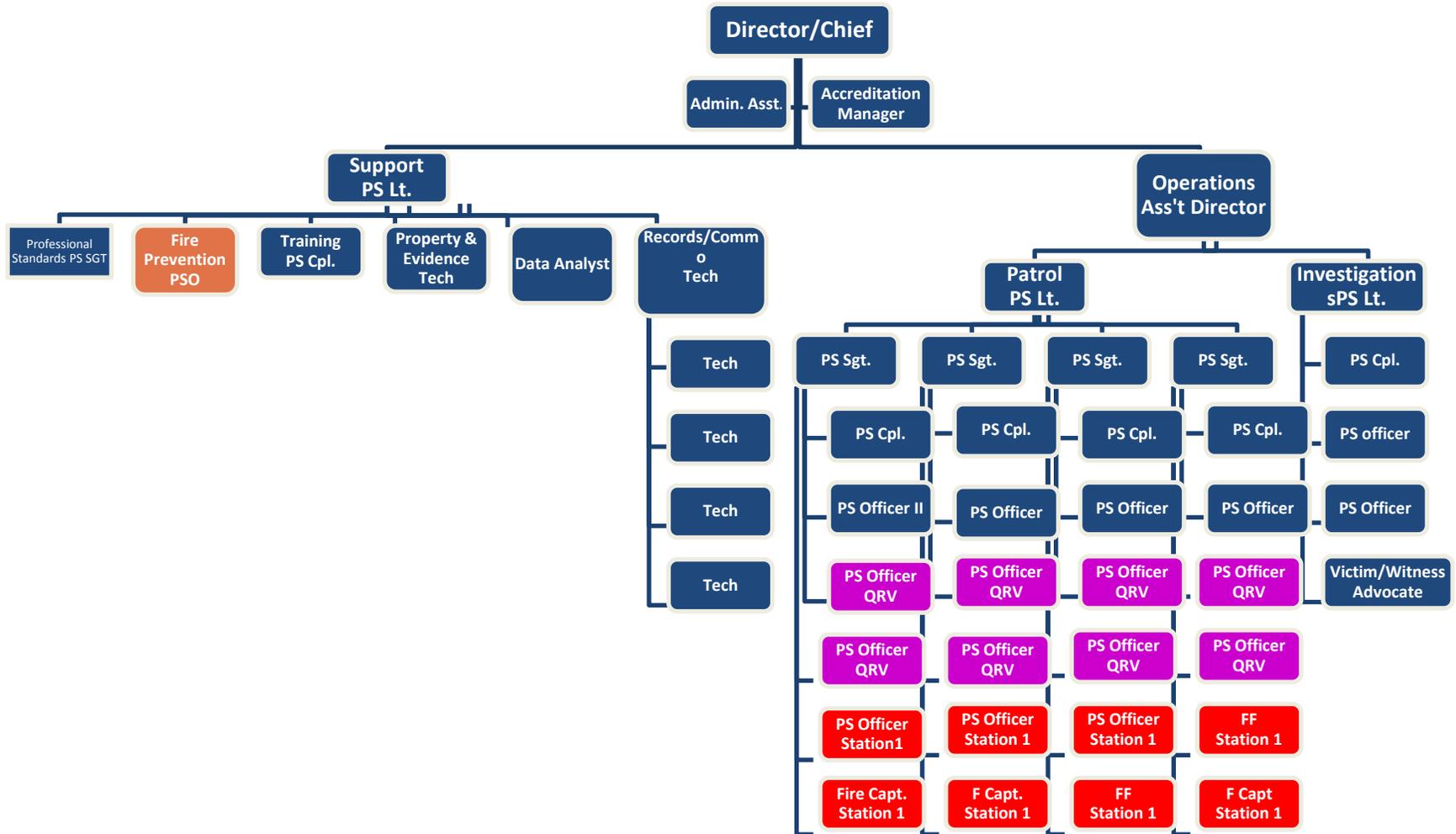


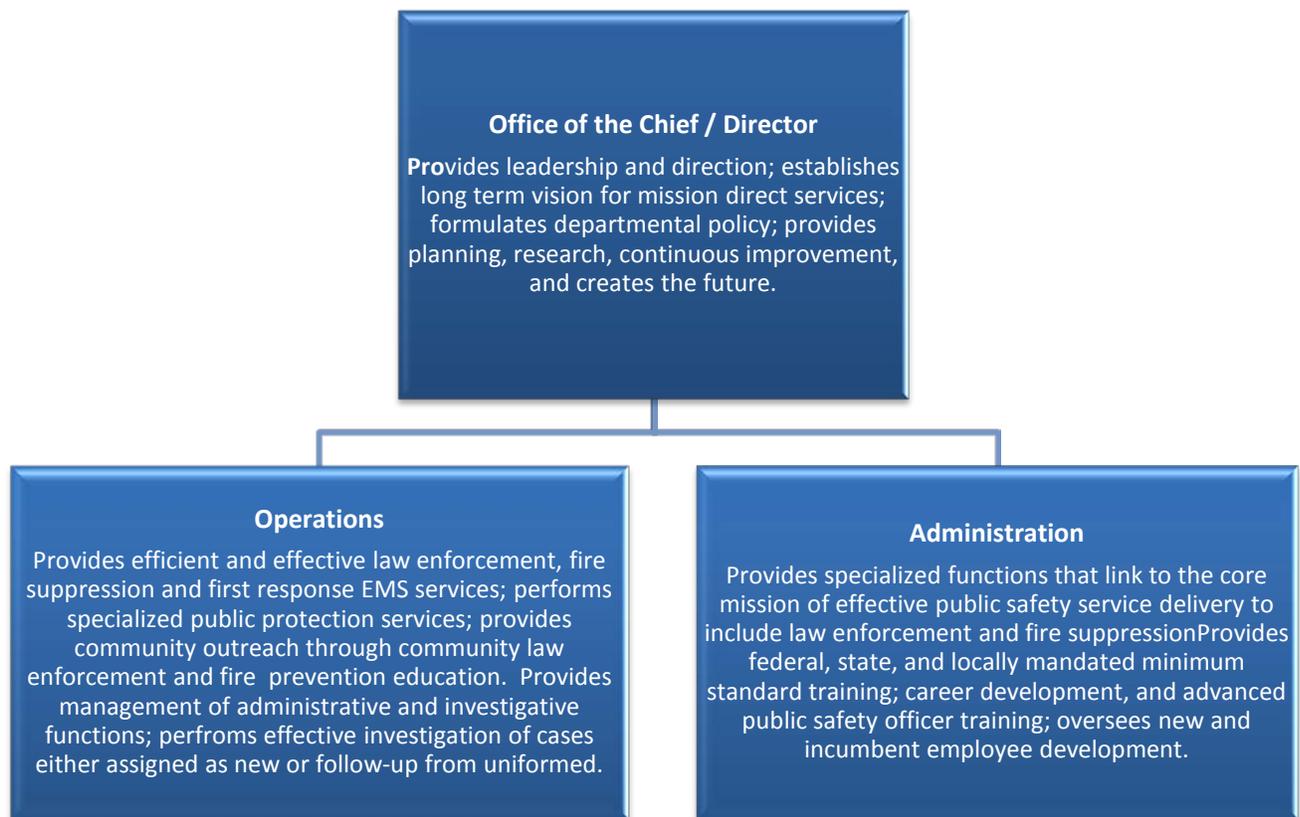
Figure 3: Recommended City of Walterboro Public Safety Department Organizational Chart



Many organizations use functional organizational charts to supplement the information in their formal organizational charts. A functional chart of the organization gives the community a clear picture of what and where key services are located within an organization. In this type of chart, each task or functional area becomes a focal point. Specialization is centralized and employees who are doing these specialized jobs or tasks can be identified. WPSD does not utilize a functional chart of the organization for this purpose.

A functional chart of the organization that links divisions together would provide WPSD a much clearer picture of the leadership functions at each organizational level, and would illustrate the work that must be performed at each of the organizational levels to include the director's office. Integrating the organization's functional and traditional organizational charts facilitates the view of an organization as a set of related responsibilities, and creates leadership teams within each organizational component. This reduces organizational silos and promotes lateral team building between organizational divisions, which is essential in a public safety department. Figure 4 illustrates a functional table of the organization that, if implemented, potentially may improve organizational structure efficiencies for the WPSD.

**Figure 4: Proposed Functional Table of the Organization**



## Recommendations:

1. The city should adopt the proposed new Walterboro Public Safety Department organizational chart. This reorganization will include adding civilian personnel to assume some duties not currently being performed as well as transferring some duties now being performed by sworn personnel. The proposed table of organization adds four positions to the current staffing level (one sworn and three civilian). We understand that the upcoming FY budget does not fund these additional positions, but we do not view that as a problem. There are numerous vacancies within the agency and the reorganization will take at least a year to implement.
2. Develop the proposed functional table of the organization to accompany the new, formal Walterboro Public Safety Department organizational chart.
3. All patrol / suppression personnel should be moved into teams working the twelve-hour shift.

# Organizational Processes

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## Human Resources

The scope of services agreed to for this project did not include a comprehensive review of the human resources management of the agency. Typically, our reports involve an overview of human resources (HR) issues within the agency to determine if industry standard practices are in place. However, upon conducting our overview it became apparent to the study team that the personnel management practices within the department were so deficient that unless those issues were addressed, it will not be possible for the city to correct the other, numerous operational deficiencies within the agency. Thus, what follows is a broad discussion of the most obvious HR issues in the agency. This should not be considered as a comprehensive plan to address these issues. Rather, our purpose here is to alert the city leaders as to the level of issues that must be addressed to meet local government industry standards and due process requirements.

Note that this review considers only the HR practices in the WPSD. We did not inquire as to the personnel practices in place in other parts of the local government. The HR challenges in the area of public safety are oftentimes more difficult than in other areas of government. Nonetheless, the city should have in place a uniform personnel system that applies equally to all aspects of the government, with specific policies and procedures to address the special needs of public safety.

Part of the problem the city faces is that, given its size, it may not be able to afford a full-time, dedicated human resources professional. Given the issues involved, it will be a major task to develop and implement the types of policies and procedures that the city needs for the WPSD. However, once this is done, there may be limited need for a full-time HR staff person. Walterboro should consider the possibility of contracting for the services of a qualified HR consulting firm to write and help implement the needed policies and procedures. Once these are in place the city could retain the services of the firm on an as-needed basis.

ICMA recommends that the city contact the International Public Management Association for Human Resources (IPMA-HR), the world's premier human resources professional association for government organizations, for assistance and guidance on these issues. ICMA is prepared to assist the city in doing so as part of this project.

### Recommendation:

4. The city should retain the services of a professional human resources expert to assist in the development and implementation of a meaningful, validated, and equitable human resources system.

## The Role of City Council

As discussed above, Walterboro operates under the council-manager form of government. In this form elected officials have limited roles in the day-to-day operation of the city. That responsibility falls to the appointed chief administrative officer and his/her department heads. The council-manager form, more than 100 years old and the most popular form of government for localities over 2,500 in population, has proven itself to be the superior form of government nationwide. While this form of government may limit the roles of elected officials in the day-to-day business of the government, it provides that the council is responsible for the most important functions of government—setting policy and adopting budgets.

In our review of the public safety department’s personnel practices we were surprised to see how little the city council was involved in setting the standards (policies) that the department should follow in dealing with personnel matters. In discussions with the city manager we learned that the city received advice from the state league of cities that the council should abandon involvement in policy making regarding personnel policy decisions. The rationale was that setting such policies would establish a contractual relationship with employees, which could undermine the at will status of city workers. While ICMA cannot give legal advice, ICMA has experience in many “at will employment” states that do have council-adopted procedures. As such, we would suggest that council consult with the city attorney and explore what, if any, consequences exist regarding city council’s involvement in the adoption of city personnel policies and procedures.

Under the current practices in place in the WPSD, the director of public safety has virtually unlimited power to set whatever standards and practices he/she chooses for employment, promotion, organizational structure, job descriptions, disciplinary practices, etc. Indeed, the policies in place generally do not even require the input or approval of the city manager.

Absent any specific policies or procedures adopted by the formal action of the city council, this allows the director to implement procedures that may promote favoritism, discrimination, and worse, allowing incompetent or unqualified individuals to not only be employed but also be promoted to supervisory positions. Obviously, this not only detracts from the quality of service that the WPSD provides to the citizens, but also places the city in a tenuous legal position.

Assuming that the city engages an HR professional to develop appropriate personnel policies and procedures, we recommend strongly that the city council adopt these procedures by ordinance or resolution as city policy. Any changes in these policies should require council approval. This would include approval of a table of organization, typically adopted as part of the budget process.

### Recommendation:

5. The City Council should review its decision to withdraw from adopting policies and procedures governing the human resources management of the WPSD. Absent the council’s adoption of policies there should be a clear direction as to who should promulgate such policies.

## Policies and Procedures Manual

The existing departmental policies and procedures manual is a collection of individual policy and procedures developed over many years; there is no focus that would make it a cohesive, integrated manual that provides guidance to members of the department in performing their duties. The existing manual contains many policies that have been in place for more than ten years and which have not been revised or reviewed. There appears to have been some effort to copy procedures from other sources (such as Commission on Accreditation for Law Enforcement Agencies (CALEA) standards), but this appears to have been done somewhat haphazardly. We also note that as with so much of the management of the agency, there is a far greater emphasis on law enforcement issues at the expense of fire suppression and prevention matters.

The policy and procedures manual for a public safety agency is its guide to all administrative and operational matters. All personnel and operational activities are driven by this document. The manual should be comprehensive, yet written in such a manner as to make it accessible to agency staff. Having a manual of hundreds of pages without being able to easily identify and locate directions to deal with specific issues has no value to the organization. The manual should not be just a collection of prohibitions to guide disciplinary actions (although that is a critical aspect of its role), but also must serve as a direction to staff members on how best to perform their duties. The existing WPSD manual, such as it is, fails on both of these goals. Producing a quality manual is no easy task, especially given the virtual absence of an ongoing effort to keep the existing manual relevant and current. Development of an effective policy and procedures manual is a long-term project which must be performed in conjunction with the overall restructuring of the agency.

One avenue that provides succinct best practice standards with regards to structuring and implementing a comprehensive policy and procedures manual, as well as other administrative and operational agency matters, is accreditation. It is recommended that WPSD pursue both fire and law enforcement accreditation, specifically through CALEA for law enforcement and through the Center for Public Safety Excellence (CPSE) for fire service. To accomplish this will require that the demanding standards of these international accreditation agencies must be used as guidance in the policy and procedures manual development process.

Development of a new policies and procedures manual and pursuing accreditation is a challenging but not impossible task for WPSD. Achieving accreditation should not be seen as a goal in and of itself, but rather a process that will produce an agency that meets international best practice standards and thus an agency that instills confidence and pride in the city and its residents. Accomplishing this must not just be a role for the accreditation manager (an ICMA-recommended position for the WPSD) or senior staff. Rather, every member of the agency should play an integral role in the creation of the new manual and development of new standards. This will allow each member of the agency to play an integral role in creating the new WPSD department, and foster “buy-in” and pride in the agency with an end goal of creating an outstanding agency.

## Recruitment and Selection

ICMA found that the WPSD has no meaningful recruiting process. The role of a public safety officer is significantly different than that of a traditional police officer or firefighter. A public safety officer must have a broader range of skills than required of either of the single disciplines. Further, the

position requires attracting candidates that have a deeper commitment to public service. The ideal candidate for a public safety officer is someone who, whatever the emergency, is prepared and trained to solve the problem.

The U.S. Department of Justice, Office of Community Oriented Policing (COPs), some years ago developed a program to help law enforcement agencies attract individuals who wanted to be police officers “in the spirit of service” rather than in the “spirit of adventure.” Called *Hiring in the Spirit of Service* (HSS), the program was focused solely on police agencies. However, we believe that the model is particularly consistent with the role of a public safety officer. We suggest that the city review the HSS approach to attracting candidates and build its recruiting effort around that approach.

ICMA further found there is no competitive examination process which ranks individuals and the existing rules provide that “no lists will be maintained.” Certainly there is value in having some flexibility in hiring decisions, but there should be an open competitive examination process that ensures some measure of transparency, and with that a ranking of candidates based upon meaningful criteria. Absent this approach the employment system has the potential to be dominated by favoritism. The current process involves the use of a reading testing instrument developed as an entry level examination for police officer. This focus on the law enforcement component of the public safety officer position is found throughout the selection and promotion and training process and speaks to the absence of consideration for fire suppression skills and abilities.

No better example of this deficiency can be found than in the absence of any physical performance testing for the position of public safety officer (PSO). While the agency does have candidates complete a physical examination as part of the process (after a conditional offer of employment as required by law), there is no effort made to evaluate the candidate’s physical capabilities to perform the duties of PSO, particularly with regards to the firefighting aspects of the position. It is well documented that firefighting requires a level of physical strength and agility different than law enforcement. Thus, the city is hiring individuals and funding their training through the fire academy, but does not know if they have the physical attributes necessary to perform firefighting duties.

As any physical ability testing of candidates will inevitably produce an adverse impact on some individuals, the city must be certain to utilize a testing process that demonstrates that such impact is directly related to the abilities required to properly perform the duties of a public safety officer, and one which is validated and can stand up to legal challenges. Fortunately, such a test has been developed and validated through a cooperative effort of the International Association of Fire Chiefs (IAFC) and the International Association of Firefighters (IAFF). Called the candidate physical ability test (CPAT), this process is in use throughout the country in both large and small agencies. The test requires trained evaluators and specialized equipment. As a result, it is generally offered by larger agencies and which then work with smaller agencies to provide them access to this testing.

When we inquired as whether WPSD was using this physical ability test, we were advised that the department was not aware of the examination nor was it available locally to Walterboro. A quick

web search by our team found that the CPAT is administered by the following South Carolina organizations:

- South Carolina Fire Academy
- Greenville Tech College
- Columbia FD
- Charleston FD
- North Charleston FD
- Mount Pleasant FD
- Rock Hill FD HR
- Greenville FD
- Summerville FD

### Recommendation:

6. The city should establish a meaningful and validated recruitment and selection process that is administered by the new position of Professional Standards Officer.

### Field Training and Probationary Periods

ICMA found there is no written policy on field training and probationary period for new WPSD staff. Such a period would provide for a formal analysis of the probationary officer's exposure to the various position tasks and his or her ability to successfully complete those assignments. Each probationary officer should have a manual assigned to him/her and which specifically lists all the functions and activities they should be able to perform (both law enforcement and fire) prior to being released from probation. A field training officer (FTO) would "check off" these experiences as they occur, with accompanying specific recommendations / observations to help improve the performance of the probationary employee. This field training function must occur for both fire and law enforcement once a candidate completes the respective academy. Each Patrol / Suppression Team should have an FTO.

### Annual Evaluations

ICMA found there is no meaningful, structured annual evaluation process which provides for not only a review of past performance, but documents goals for future performance and career development. This evaluation should exist for all personnel, including the director. It should be well documented and require a face-to-face meeting between reviewer and the employee to discuss in detail the evaluation. Further, employees should be able to respond to the evaluation in writing and participate in the development of their annual goals.

### Promotional Processes

ICMA found no formalized promotional process exists in the department. The current process as to who to appoint is principally at the director's discretion. For promotional consideration, there should be formalized and approved minimum experience, training, and educational requirements

for eligibility. In the event that current employees do not meet these eligibility requirements the department should then consider lateral transfers into supervisory positions with explicit requirements.

Further, the promotional process should include both a written testing component and a scoring system that recognizes educational achievement, annual evaluation scores, and technical training. There should be a minimum time in grade prior to advancement to the next level. Some additional process should be included for employing a structured interview and/or an assessment center. The promotional process should be conducted on a regular basis, perhaps once every two years, with development of an eligibility list depicting the order of candidates. We believe that flexibility in the final selection is critical, which typically involves a “rule of three” approach allowing for the selection of one of the top three candidates.

The promotional process should also include a probationary period wherein the probationary supervisor receives written evaluations alerting him/her to their deficiencies and with recommendations for improvement. Ultimately, all promotional decisions should be recommended by the WPSD director and approved by the city manager.

## Disciplinary Processes

It is impossible to operate a fair, equitable, and meaningful disciplinary process without proper policies and procedures in place (see discussion on polices manual). Once such a manual is in place, there must be a structured, clearly defined disciplinary process. Any discipline action should have a focus on encouraging employee compliance with policies and procedures and modifying behavior, rather than just implementing punishment for infractions.

The disciplinary process should be clearly spelled out in policy format so that managers and employees fully understand the system, the various levels of infractions, and the potential consequences. The system must be progressive (that is providing for increasingly higher levels of punishment for continuing poor performance or infractions). The disciplinary process must also provide for adequate documentation of each step in the process, and it must provide for due process, which all governmental actions require.

The South Carolina Police and Fire Chiefs Associations can be a valuable resource to identify model disciplinary policies particularly designed to meet the needs of South Carolina law enforcement and fire agencies.

## In-Service Training

We reviewed the in-service training records of the department. While the department has devoted considerable effort to tactical training we see little indication that a commitment has been made to meaningful career development, particularly for supervisors. There is a noticeable absence of supervisory training, particularly in the fire suppression aspect of the department.

## Recommendation:

7. The city should establish an integrated system of field training, annual evaluations, in-service training, promotions, and discipline.

## Job Title Descriptions

There needs to be formal title descriptions that move beyond the typical generic descriptions for police officer and firefighter and which focus on the specific job requirements of the title. This is particularly true for supervisory and management assignments.

## Position Control

ICMA found the WPSD does not maintain an accurate, easily accessible position control list, and which can be used to track position descriptions (job titles), current assignments, dates of promotion, etc. With considerable effort the interim director was able to assemble this information, and we thank him for his effort.

A position control list identifies every budgeted position by number and the current title (job description) assigned to the position. When positions are modified by a change in title this should be approved by the city council, since it has budgetary implications. Table 1 is the current position control list created by ICMA and which depicts existing titles, by position control number. Table 2 depicts the ICMA recommended changes to the current position control list.

**Table 1: WPSD Current Position Control: 2013-2014 Budgeted Positions**

Position Classification	Grade	Position Control No.	Position Classification	Grade	Position Control No.
PUBLIC SAFETY DIRECTOR	31B	46	PUBLIC SAFETY OFFICER	13F/15C	9
ASST. PUBLIC SAFETY DIR.	24A	13	PUBLIC SAFETY OFFICER	15C	12
PUBLIC SAFETY CAPTAIN	20A	30	PUBLIC SAFETY OFFICER	13F/15C	15
PUBLIC SAFETY CAPTAIN	20A	44	PUBLIC SAFETY OFFICER	15C	18
PUBLIC SAFETY SERGEANT	18A	11	PUBLIC SAFETY OFFICER	13F/15C	23
PUBLIC SAFETY SERGEANT	18A	20	PUBLIC SAFETY OFFICER	13F/15C	25
PUBLIC SAFETY SERGEANT	18A	22	PUBLIC SAFETY OFFICER	13F/15C	29
PUBLIC SAFETY SERGEANT	18A	27	PUBLIC SAFETY OFFICER	13F/15C	31
PUBLIC SAFETY SERGEANT	18A	32	PUBLIC SAFETY OFFICER	13F/15C	36
PUBLIC SAFETY SERGEANT	16A/18A	39	PUBLIC SAFETY OFFICER	13F/15C	38
PUBLIC SAFETY CORPORAL	17A	3	FIRE CAPTAIN	13G	4
PUBLIC SAFETY CORPORAL	17A	7	FIRE CAPTAIN	13G	17
PUBLIC SAFETY CORPORAL	17A	8	FIRE CAPTAIN	13G	33
PUBLIC SAFETY CORPORAL	17A	10	FIRE ENGINEER	11B	16
PUBLIC SAFETY CORPORAL	17A	14	FIREMAN	10C/15C	1
PUBLIC SAFETY CORPORAL	17A	24	FIREMAN	10C	19
PUBLIC SAFETY CORPORAL	17A	26	CIV COMMUNICATIONS TECHNICIAN	8A	40
PUBLIC SAFETY CORPORAL	17A	28	CIV COMMUNICATIONS TECHNICIAN	8A	41
PUBLIC SAFETY CORPORAL	17A	34	CIV COMMUNICATIONS TECHNICIAN	8A	42
PUBLIC SAFETY OFFICER	13F/15C	21	CIV COMMUNICATIONS TECHNICIAN	8A	43
PUBLIC SAFETY OFFICER	15C	2	CIV CRIMINAL INFO. COORDINATOR	8B	35
PUBLIC SAFETY OFFICER	13F/15C	5	CIV OFFICE ADMINISTRATOR	8E	37
PUBLIC SAFETY OFFICER	15C	6	CIV VICTIM/WITNESS ADVOCATE	8C	45

**Table 2: ICMA Proposed WPSD Position Control**

Position Classification	Grade	Position Control No.	Position Classification	Grade	Position Control No.
PUBLIC SAFETY DIRECTOR	31B	46	PUBLIC SAFETY OFFICER	13F/15C	25
ASST. PUBLIC SAFETY DIR.	24A	13	PUBLIC SAFETY OFFICER	17A	26
PUBLIC SAFETY LIEUTENANT	18A	11	PUBLIC SAFETY OFFICER	17A	28
PUBLIC SAFETY LIEUTENANT	20A	30	PUBLIC SAFETY OFFICER	13F/15C	29
PUBLIC SAFETY LIEUTENANT	20A	44	PUBLIC SAFETY OFFICER	13F/15C	31
PUBLIC SAFETY SERGEANT	18A	20	PUBLIC SAFETY OFFICER	17A	34
PUBLIC SAFETY SERGEANT	18A	22	PUBLIC SAFETY OFFICER	13F/15C	36
PUBLIC SAFETY SERGEANT	18A	27	PUBLIC SAFETY OFFICER	13F/15C	38
PUBLIC SAFETY SERGEANT	18A	32	FIRE CAPTAIN	13G	4
PUBLIC SAFETY SERGEANT	18A	50	FIRE CAPTAIN	13G	17
PUBLIC SAFETY CORPORAL	17A	3	FIRE CAPTAIN	13G	33
PUBLIC SAFETY CORPORAL	17A	7	FIREFIGHTER	10C/15C	1
PUBLIC SAFETY CORPORAL	17A	8	FIREFIGHTER		19
PUBLIC SAFETY CORPORAL	17A	10	CIV COMMUNICATIONS TECHNICIAN	10C	40
PUBLIC SAFETY CORPORAL	17A	14	CIV COMMUNICATIONS TECHNICIAN	8A	41
PUBLIC SAFETY CORPORAL	16A/18A	39	CIV COMMUNICATIONS TECHNICIAN	8A	42
PUBLIC SAFETY OFFICER	15C	2	CIV COMMUNICATIONS TECHNICIAN	8A	43
PUBLIC SAFETY OFFICER	13F/15C	5	CIV COMMUNICATIONS TECHNICIAN	8C	49
PUBLIC SAFETY OFFICER	15C	6	CIV CRIMINAL INFO. COORDINATOR	8A	35
PUBLIC SAFETY OFFICER	13F/15C	9	CIV OFFICE ADMINISTRATOR	8E	37
PUBLIC SAFETY OFFICER	15C	12	CIV VICTIM/WITNESS ADVOCATE	8E	45
PUBLIC SAFETY OFFICER	13F/15C	15	CIV ACCREDITATION MANAGER		16
PUBLIC SAFETY OFFICER	15C	18	CIV DATA ANALYST		48
PUBLIC SAFETY OFFICER	13F/15C	21	CIV EVIDENCE TECHNICIAN		47
PUBLIC SAFETY OFFICER	13F/15C	23			
PUBLIC SAFETY OFFICER	17A	24			

In reviewing the current position control list we find it difficult to understand how certain positions have been filled with regard to the appropriate rank necessitated by the position. In several instances there does not appear to have been any analysis of the responsibilities of the position in relationship to the necessary supervisory responsibilities of the position. Thus, we find that positions that would normally carry with them certain supervisory responsibilities (training, community policing) are filled by individuals who only hold the rank of public safety officer, while positions that have limited supervisory responsibilities and should be filled by civilians (property / evidence) are filled by individuals who hold titles that carry supervisory responsibilities. This in no way is a comment on the performance of the individuals assigned, but rather a comment on the absence of a meaningful analysis of the staffing and rank needs of the agency. In essence, we recommend that unless an individual is involved in law enforcement or firefighting responsibilities or engaged in directly supervising those who are, the position can and should be occupied by a civilian. Table 3 cross-walks current WPSD positions to ICMA proposed positions.

**Table 3: Position Control Crosswalk: Current to Proposed**

Current WPSD Positions		Proposed ICMA Positions	
Director	1	Director	1
Assistant Director	1	Assistant Director	1
PS Captain	2	PS Captain	0
PS Lieutenant	0	PS Lieutenant	3
PS Sergeant	6	PS Sergeant	5
PS Corporal	9	PS Corporal	6
PS Officer	14	PS Officer	18
Fire Engineer	1	Fire Engineer	0
Fire Captain	3	Fire Captain	3
Firefighter	2	Firefighter	2
Communication Technician	4	Communication Technician	5
Criminal Justice Info Coordinator	1	Criminal Justice Info Coordinator	1
Office Administrator	1	Office Administrator	1
Victim / Witness Advocate	1	Victim / Witness Advocate	1
Evidence Technician	0	Evidence Technician	1
Data Analyst	0	Data Analyst	1
Accreditation Manager	0	Accreditation Manager	1
<b>Total</b>	<b>46</b>	<b>Total</b>	<b>50</b>

In addition we have included a proposed table of organization (Figure 3). This illustrates our recommendations of appropriate ranks to fill specific positions as well as the civilianization of certain activities within the agency. These recommendations include reassignment of some ranks and the addition of three civilian positions (an additional dispatcher, an accreditation manager, and an evidence and property manager).

We are not recommending any personnel be reduced in rank. Rather, and as needed, this transition should occur through attrition, as is happening with the remaining dedicated firefighters. There is no doubt this approach lengthens the transition process to a full PSO agency balanced with civilian

positions, but it is a transitional process focused on treating long-term employees fairly. However, it should be the clear policy moving forward that no individual can be promoted to or be hired into any position without being cross-trained in both police and fire services. We recommend that any individual assigned to a supervisory position be given the opportunity to complete cross-training within a specific period of time, and absent their successful completion of cross-training they would be reassigned to a nonsupervisory position, with their current salary “redlined” and maintained until their separation from the agency.

### Recommendation:

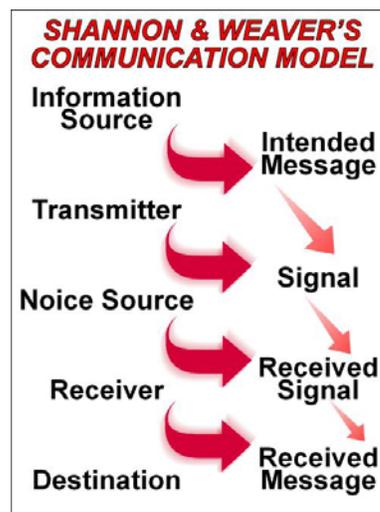
8. The city should utilize a position control list system that is reported to the city council on a regular basis. Title / job descriptions should be promulgated for each position in the agency and adopted by the city council.

## Organizational Communication

In any organization that has a decentralized workforce, the flow of communication will be a challenge. This problem is even more prevalent in a fire service or public safety agency that has members working on different shifts and at different locations throughout the jurisdiction. The WPSD fire operational staff is deployed on twenty-four hour rotating shifts, while WPSD administrative staff works a normal Monday-to-Friday schedule and law enforcement patrol works rotating twelve-hour shifts. Additionally, the WPSD fire deployment model does not have a first-line supervisor on every shift at every station, further diminishing the accountability for receiving communication in any form that is intended to guide or direct daily operations. In discussion with fire staff of WPSD, it was determined there are accountability and responsibility issues in the fire suppression component of the department, some of which can be linked to poor communication.

While the department does use multiple methods of communication, such as e-mail, written directives from senior staff, verbal pass-downs between shifts, and verbal information sharing from top to bottom and bottom to top of the organizational chart, any failure to communicate effectively can create an expectation of not receiving information, which potentially leads to morale issues and work that does not get done. The importance of effective communication, established communication processes, and ongoing follow-up cannot be overstated. Developing and implementing an effective communication model is essential to ensuring that good communication is occurring throughout WPSD. Figure 5 illustrates an effective communication model that, if implemented by the WPSD, will open communication conduits and create a culture of accountability and operational efficiency.

**Figure 5: Shannon-Weaver Communication Model**



Following the Shannon-Weaver communication model ensures a circular communication flow with these essential elements of the communication process:<sup>2</sup>

<sup>2</sup> From the University of Rhode Island, "The Shannon-Weaver Model Defined," <http://www.uri.edu/artsci/lsc/Faculty/Carson/508/03Website/Hayden/ShanWeav.html>.

- **Source:** The source of communication is the initiator, or origin, that puts the model into action. It is an individual or group that has a specific reason to begin the communication process.
- **Encoder:** Once the purpose of the source has been decided, there must be a specified format for the message to take. This is what the communication encoder does; it takes the concept that the source wants sent out, and puts it into a suitable format for later interpretation (types the letter/e-mail, prepares notes for a verbal discussion).
- **Message:** The information, idea, or concept that is being communicated from one end of the model to the other is the message. Most of the time, in human communication, the message contains a distinct meaning.
- **Channel:** It is essential for meaningful communication that a suitable means to transmit the message be selected. The channel is the route that the message travels on, be it verbal, written, electronic, or otherwise.
- **Noise:** It is inevitable that noise may come into play during the communication process. Noise could be considered an interference or distortion that changes the initial message; anything that can misconstrue the message may be noise. Noise can be physical, as in an actual sound that muffles the message as it is being said, or it can be semantic, such as if the vocabulary used within the message is beyond the knowledge spectrum of its recipient. In a decentralized organization, it could be the disconnect of shift work or the physical location where the message is delivered and received. In order for communication to be effective, noise must be reduced.
- **Decoder:** Before the message reaches the intended recipient, it must be decoded, or interpreted, from its original form into one that the receiver understands. This is essentially the same interaction as that of source and encoder, only in a reversed sequence (skills to read, listen).
- **Receiver:** In order for communication to be executed, there must be a second party at the end of the channel the source has used. The receiver takes in the message that the source has sent out.
- **Feedback:** For meaningful communication to come to fruition, it is vital that the receiver provide feedback to the source. Feedback relates to the source whether the message has been received, and most importantly, if it has been interpreted accurately. Without feedback, the source would never know if the communication was successful. Ongoing communication is made possible by the cyclical route feedback allows; if more communication between the parties is necessary, they can follow the model indefinitely.

### Recommendation:

9. Develop and implement a communication model for the organization that ensures an effective conduit of clear and productive communication throughout the entire WPSD.

## Time Allocation

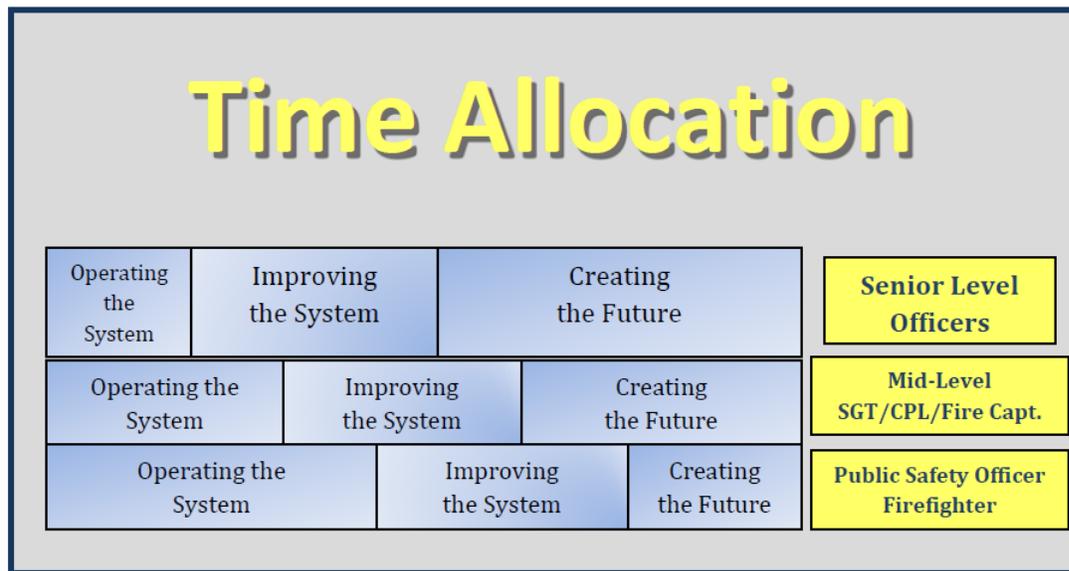
To effectively operate in an organization, an employee must understand his or her role and, as importantly, where he/she should allocate his/her time during the workday or shift to be most effective. Understanding this concept is essential in an organization that has a broad organizational chart such as WPSD. Three segments of organizational time allocation are central to achieving the goals and objectives of any organization and, more importantly, for enabling the organization to fulfill its mission and realize its vision: (1) operating the system; (2) improving the system; and (3) creating the future.

Operating the system is that time during the workday that an organizational member is implementing service deliverables, touching those components of the organization that make it go. Improving the system is the time during the workday that an organizational member spends seeking ways to make service deliverables and organizational components more efficient, or, more simply put, better. Creating the future is that critical piece of time allocation when an organizational member develops goals and objectives that link to strategic planning and considers the vision of the organization in a way that focuses on successful, effective outcomes.

During conversations with management and field staff, ICMA learned that current fire captains are not sure where they fit in the organization, or where their responsibility level lies to provide programmatic guidance to firefighters and/or public safety officers. In addition, fire staff advised ICMA they do not receive regular daily guidance and updated information for programmatic work from WPSD management staff. This was confirmed in conversation with middle and senior staff. This is an important management and leadership contact that must occur on a daily basis to ensure that those operating the system are engaged in consistent practices. As well, middle management can effect improvement across the system through this daily contact and leadership.

It was further determined that senior-level officers (director/assistant director/police captain) may respond and take command of fire incidents and/or police incidents when midlevel rank officers are on the scene. While this may be the result of not having all uniform staff members cross-trained as public safety officers, it is important that all members operate within their scope of responsibility. Figure 6 illustrates how various levels of a public safety department should allocate time each day.

**Figure 6: Time Allocation Model**



Employees at all levels of the organization—from director to firefighter/public safety officer—need to maintain a balance between each time-allocation component according to their level of responsibility. Managers and firefighters/public safety officers have a responsibility to understand their organizational roles and responsibilities and to perform the tasks related to these roles and responsibilities. One would not expect senior-level officers to spend as much time operating the system as a frontline service provider does. Conversely, one would not expect a midlevel officer—a sergeant, corporal—to spend as much time as a senior-level officer planning for the future of the organization. Through understanding and practicing the concepts of the time allocation model, each level of the organization develops a different set of priorities, and employees at each level successfully allocate their time accordingly.

**Recommendations:**

10. Adopt a time allocation model; implement and monitor time allocation to ensure effective use of officer and staff time as it relates to achieving the organizational mission and to each individual’s position in the organization.
11. Establish a clear chain of command for the department from the rank of firefighter/public safety officer to the director, utilizing basic principles of unity of command and span of control. Each employee should answer to one supervisor and each officer (supervisor) should clearly understand their role in the organization, their responsibilities, and the level of leadership and accountability that comes with their position.

## Strategic Planning

The development of a long-range fire protection and prevention comprehensive strategic plan involves three key steps. The first step is to generate an assumption of what the community will look like at the end of the planning process. Second, a fire services agency, or in the case of WPSD the fire services component of the department, needs to assess realistically the strengths and weaknesses of the existing fire protection system to include codes, standards, and ordinances relating to fire prevention efforts, public safety education programs, and emergency response capability. The third and final step is to project the needed capabilities and capacity of the fire protection system and its fire suppression services component as the community changes.<sup>3</sup> This process helps to ensure that an adequate level of resources, including staffing and equipment, are allocated to meet the community's needs for the services delivered by the fire agency or fire services component as efficiently as possible. A strategic plan also assists a local government in matching resources with available revenues.

Defining clear goals and objectives for any organization through a formal strategic planning document establishes a resource that any member of the organization, or those external to the organization, can view and determine in what direction the organization is heading, and as well how the organization is planning to get there.

In a strategic plan, it is essential that clear and achievable goals and objectives for each program area are developed. Each program area must then (1) define its goals; (2) translate the goals into measurable indicators of goal achievement; (3) collect data on the indicators for those who have utilized the program; and (4) compare the data on program participants and controls in terms of goal criteria.<sup>4</sup> Objectives should be SMART, an acronym that stands for **s**pecific, **m**easurable, **a**mbitious/attainable, **r**ealistic, and **t**ime-bound. Additionally, these goals should link back to fiscal planning goals.

The WPSD does not have a comprehensive strategic plan that focuses on the future, that provides clear service delivery direction, and that defines resources that support the strategy for fire protection and service deliverables. Figure 7 illustrates a basic strategic planning model the WPSD can utilize when developing its comprehensive strategic plan either as an agency in whole, or for the fire service component.

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<sup>3</sup> *Fire Protection Handbook*, Twentieth Edition, Volume II (National Fire Protection Association, 2008), 12-5.

<sup>4</sup> Grover Starling, *Managing the Public Sector* (Cengage learning), 287.

**Figure 7: Basic Strategic Planning Model**



As there is no perfect strategic planning model for an organization, the above model provides one form from which the organization can begin to develop a strategic planning process, and eventually a strategic plan. Listed below are the steps for a successful approach to this critical process: <sup>5</sup>

**Purpose-Mission:** This is the statement that describes why an organization exists. This statement should describe what customer needs are intended to be met and with what services. Top-level management should agree what the mission statement/purpose is, understanding this will change over the years as the organization changes.

**Selection of goals the organization must meet to accomplish its mission:** Goals are general statements about what an organization needs to accomplish to meet its purpose, or mission, and address major issues it faces.

**Identify specific approaches or strategies that must be implemented to reach each goal:** The strategies are often what change the most as the organization eventually conducts more robust strategic planning, particularly by more closely examining the external and internal organizational environments.

**Identify specific actions to implement each strategy:** Specific activities each division or major function must undertake to ensure it is effectively implementing each strategy must be identified. Objectives should be clearly worded to the extent that staff and the community can assess if the objectives have been met or not. Ideally, top management develops specific committees that each have a work plan, or set of objectives.

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<sup>5</sup> McNamara, C. (1996-2007) *Basic Overview of Various Strategic Planning Models*. Adapted from the Field Guide to Nonprofit Strategic Planning and Facilitation. Minneapolis, MN: Authenticity Consulting, LLC.

**Monitor and update the plan:** Regularly reflect on the extent to which the goals are being met and whether action plans are being implemented. Perhaps the most important feedback is positive feedback from customers, both internal and external.

### Recommendations:

12. Develop and implement a comprehensive strategic plan.
13. Incorporate measurable and obtainable goals and objectives into strategic and comprehensive planning documents as well as annual and long-range fiscal documents.

## Performance Measurement

Performance measurement is the ongoing monitoring and reporting of progress toward pre-established goals. It captures data about programs, activities, and processes, and displays data in standardized ways to help communicate to service providers, customers, and other stakeholders how well the agency is performing in key areas. Performance measurement provides organizations with tools to assess performance and identify areas in need of improvement. In short, what gets measured gets done.

Performance measurement systems vary significantly among different types of public agencies and programs. Some systems focus primarily on efficiency and productivity within work units, whereas others are designed to monitor outcomes produced by major public programs. Still others track the quality of services provided by an agency and the extent to which citizens are satisfied with these services.

Within the fire service and as well public safety services, performance measures tend to focus on inputs (the amount of money and resources spent on a given program or activity) and short-term outputs (the number of fires in the community, for instance). One of the goals of any performance measurement system should be also to include efficiency and cost-effective indicators, as well as explanatory information on how these measures should be interpreted. Performance measures as developed by the Governmental Accounting Standards Board are shown in Table 4.

**Table 4: The Five GASB Performance Indicators**

Category	Definition
<b>Input indicators</b>	<b>These are designed to report the amount of resources, either financial or other (especially personnel), that have been used for a specific service or program.</b>
<b>Output indicators</b>	<b>These report the number of units produced or the services provided by a service or program.</b>
<b>Outcome indicators</b>	<b>These are designed to report the results (including quality) of the service.</b>
<b>Efficiency (and cost-effectiveness) indicators</b>	<b>These are defined as indicators that measure the cost (whether in dollars or employee hours) per unit of output or outcome.</b>
<b>Explanatory information</b>	<b>This includes a variety of information about the environment and other factors that might affect an organization's performance.</b>

One of the most important elements of performance measurement within the fire and public safety service is to describe service delivery performance in a way that leads both citizens and those providing the service to have the same understanding. The customer will ask, "Did I get what I expected?" The service provider will ask, "Did I provide what was expected?" Ensuring that the answer to both questions is "yes" requires alignment of these expectations and the use of

understandable terms. As discussed in the 2012 edition of ICMA's *Managing Fire and Emergency Services*, jargon can often get in the way:

*Too often, fire service performance measures are created by internal customers and laden with jargon that external customers do not understand. For example, the traditional fire service has a difficult time getting the public to understand the implications of the "time temperature curve" or the value of particular levels of staffing in the suppression of fires. Fire and emergency service providers need to be able to describe performance in a way that is clear to customers, both internal and external. In the end, simpler descriptions are usually better.<sup>6</sup>*

The WPSD does not have a performance measure system in place for fire service delivery. The department does collect typical fire services data on incident responses, training, and fire prevention activities, to name a few areas. These statistics, although reflecting typical workload measures seen among fire service organizations today, should link department goals to specific target rates or percentages if they are to be used to justify program budgets and service deliverables. Specific police performance measures are discussed elsewhere in this report.

Establishing a performance management system within the framework of an overall strategic plan would help Walterboro management and elected officials gain a better understanding of what the WPSD fire service delivery is trying to achieve, how service is delivered, and where adjustments may be needed. This is better understood within the context of operational components such as turnout and response time, fire prevention activities, and effectiveness of extinguishing fires, to name a few.

### Recommendations:

14. Develop and implement a performance measure reporting system that expands the type of measurement the WPSD uses.
15. Develop performance measures for each department activity, and link these to strategic planning document and fiscal/budget documents.

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<sup>6</sup> I. David Daniels, "Leading and Managing," in *Managing Fire and Emergency Services*, Adam K. Thiel and Charles R. Jennings, eds. (Washington, DC: International City/County Management Association, 2012), 202.

## Public Safety Department Overview

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An alternative to the traditional deployment of police and fire resources is the public safety officer (PSO) form of public safety service delivery. Walterboro has adopted the fully consolidated public safety department design in which all members of the department are to be trained in both law enforcement and fire suppression duties. This service delivery model, if deployed properly, is considered an efficient and effective manner to staff and deploy police and fire services. The success of a fully consolidated agency depends on having individuals work together as a team, and, as well, being supervised by an individual who is trained in and has the supervisory knowledge, skills, and abilities of both disciplines. Thus, teams should be comprised of public safety officers under the supervision of a cross-trained supervisor. Ideally, this will occur with all team members working the same shift rotations.

The WPSD has never fully implemented the public safety concept and this has led to ongoing confusion as to the roles and responsibilities of the department's members. The transition to a public safety agency has been complicated further by the city's decision to permit previously retired firefighters to return to service in the exclusive assignment role as station-bound, fire suppression members. There are currently five individuals in this situation (three fire captains and two firefighters). These individuals work a twenty-four-hour shift along with cross-trained public safety officers assigned to station duties. This approach undermines the public safety concept, which is based upon the premise that PSOs will perform law enforcement functions when not performing firefighting duties. Further, it undermines the team approach to delivering public safety services since there essentially are two "departments"—the patrol department and the fire department.

(The fact that the main building housing the fire apparatus still retains the sign "Walterboro Fire Department" is an indication of this.)

It is essential that individuals responsible for incident command duties be cross-trained. The more exposure the command staff has to all aspects of the public safety mission, the better the decision making will be both administratively and operationally. In any transition from a traditional public safety structure (police and fire as separate agencies), there is concern by rank-and-file members who are not cross-trained that managers do not understand their work. To avoid this pitfall, managers need to establish open and positive communication addressing all concerns and issues. Having managers come from both sides of the equation—police and fire—and be cross-trained in both components of service delivery will help ensure that an open and comprehensive communication process occurs.

In a fully staffed PSO service delivery model, the agency would be comprised totally of public safety officers. This, of course, may take considerable time if the city chooses to retain individuals who are unwilling to be cross-trained or who may be "grandfathered" and not have to undertake the cross-training. (In Kalamazoo, Mich., for example, the transition to the full public safety model took almost thirty years). Further, in a fully integrated public safety department, the public safety director should hold the title of police and fire chief to clarify that this individual is responsible for all public safety activities.

The value and efficiency in having all personnel meet the same training requirements and share the same public safety philosophy are realized through consistent pay structuring, job tasking, program merging, and organizing available personnel to meet the public safety requests for service in a community. Additional efficiencies are realized through combining all administrative functions in one agency as well as by combining the consolidated public safety model with other recommendations in this report, such as using quick response vehicles for public safety service delivery.

The city of Walterboro transitioned to a public safety department in 2007. Today the city deploys this service as a partially cross-trained agency, with traditional fire and police services deployed utilizing traditional response vehicles. Based on examination of training records provided to ICMA, it was determined that 45 percent of the uniform workforce (includes command staff and first-line supervisors) is currently cross-trained. Within this 45 percent, 59 percent of the first-line supervisors and command staff are cross-trained. There are members of the department who are grandfathered, but are considering becoming cross-trained.

### Recommendation:

16. The department should consider the deployment of nontraditional vehicles (see Figures 8 and 9) that will serve both law enforcement and fire suppression capabilities. ICMA further recommends the department vigorously pursue cross-training of all uniform and command staff to ensure a fully implemented public safety department. Additionally, ICMA recommends the department reorganize as illustrated in the proposed organizational chart (Figure 3).

Figure 8: Quick Response Vehicle



Figure 9: Quick Response Vehicle



The vehicles illustrated in Figures 8 and 9 are utilized by cross-trained public safety officers. The vehicle is staffed for law enforcement patrol with a cross-trained PSO who is able to quickly respond to calls for police service, handling most if not all police calls much as the officer would from a traditional sedan/SUV police unit. Although pursuit capabilities may be more limited than in a traditional sedan, this is counterbalanced by the added capability the vehicle has with regards to a public safety department service delivery model.

Both vehicles shown are equipped with firefighting capabilities that include a compressed air foam system (CAFS). CAFS was introduced and advocated for structural firefighting in the 1990s as a way to provide greater fire knockdown power, and to decrease water usage, hose line weight, and water damage. CAFS is increasingly viewed as a possible way to offset reduced staffing policies among career fire service organizations and decreased volunteerism among volunteer and combination departments.

The effects of CAFS on required manpower for suppression activities is well documented in the literature and has been consistently observed, both in actual fire-ground situations and in simulated exercises.<sup>7</sup> CAFS is further considered a force multiplier in that the hoselines are lighter and, generally, the CAFS stream projects further than a water stream. While there is some debate that goes on about whether CAFS is appropriate for interior attacks, especially in confined, non-ventilated areas (because of the injection of air), there remains little debate over the effectiveness of CAFS in exterior or "transitional" attacks, as well as for exposure protection. What makes CAFS so effective in these kinds of attacks and in exposure protection is that it "sticks" to what it hits, especially on vertical surfaces.

In Walterboro, this type of multipurpose vehicle would be staffed with one PSO, and could be on active patrol. The PSO would respond to fire calls for service along with the traditional fire suppression units and to police calls for service with PSOs in traditional police sedans and SUVs. Since it would be an actively deployed vehicle with fire suppression capabilities, it could be used to establish an initial attack and in some cases handle the response before other units arrive.

An alternative is the use of a sport utility vehicle (SUV) with a compressed air foam "skid unit" positioned in the cargo compartment. These units have the appearance of a more traditional law enforcement vehicle, but have less fire extinguishing agent available and thus would have less overall fire suppression capabilities compared to the quick response vehicle model proposed by ICMA.

## Reorganization Overview

As indicated in the discussion above, ICMA has found that the current organizational chart for WPSD is not as effective as it potentially can be. Through reorganization and the deployment of more versatile vehicles and operations staff, maximum effectiveness can be realized.

The discussion that follows reiterates the proposed organizational chart for WPSD with a focus on operations. In this discussion, fire services is proposed to be centralized to the main fire station

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<sup>7</sup> Robert G. Taylor, "Compressed Air Foam Systems in Limited Staffing Conditions," [http://www.cafsinfo.com/cafs\\_limited\\_staffing.html](http://www.cafsinfo.com/cafs_limited_staffing.html).

with two personnel stationed there, and with two PSOs staffing actively deployed QRVs (one in each of the service areas of the currently-staffed satellite stations).

In this proposed reorganization, a number of changes occur, which are discussed here and elsewhere within this report. ICMA found that the investigations/administrative division warrants reorganization, and certain organizational titles and responsibilities should be changed. There will also be efficiency in civilianizing certain positions.

As already discussed, ICMA found that not all uniform staff members are cross-trained as public safety officers, which has adverse impacts on fire operations. Under the current system, each fire station is staffed with one WPSD staff member trained at minimum with firefighter credentials. Under this model, there is a strong reliance on police patrol officers cross-trained as firefighters to be available to respond to fire calls. However, with minimum staffing of two police officers per shift and no guarantee these uniform staff members are cross-trained in fire suppression, the public safety officer model becomes ineffective. Additionally, responding three fire apparatus with one person each is inefficient.

ICMA recommends that the WPSD expedite the process to cross-train all uniform members of the law enforcement component in fire suppression. We further recommend that all fire staff members be encouraged to cross-train in law enforcement to be utilized as available capacity to back-fill law enforcement shift vacancies, and to be available as surge capacity in law enforcement as needed. However, whether personnel trained only in fire service duties agree to cross-training or not, they should be moved into the patrol / suppression teams working the twelve-hour shift. As these individuals leave the agency their positions should be eliminated and replaced with fully cross-trained PSOs.

Regarding staffing of the fire suppression component, ICMA recommends that fire suppression collapse all staffing to the main fire station in the central portion of the city (station 1). ICMA further recommends that the staffing at station 1 consist of two individuals (fire certified only and PSOs as needed), and that the schedule for this staffing be consistent with patrol staffing, that is, twelve hour shifts.

The current fire-PSO staff member who is the fire marshal should be assigned to the support bureau and work a twelve-hour, days-only shift, including on weekends, in order to accommodate fire inspections. In this staffing model, fire operations will come under the command of the patrol sergeant, with the fire captain and firefighter titles eventually removed through attrition but until then reporting to the team leader, the sergeant. Additionally, the current training position within fire services should assume the role of WPSD training officer. This individual is currently cross-trained and can serve in the PSO training capacity.

ICMA recommends that two public safety officers be assigned to a quick response vehicle each (as illustrated in Figures 8 and 9) and be actively deployed. One PSO/QRV would cover the northern portion of the city utilizing station 3 as a district office; the other would patrol the southern portion of the city utilizing station 2 as a district office. Utilizing these vehicles, the public safety officer can respond to both calls for police assistance and calls for fire assistance. Under this model, fire suppression then has the capability to respond with one traditional fire suppression apparatus

(staffed with two) and one or two quick response vehicles (staffed with one each), depending on the nature of the call. Utilizing the quick response vehicle for police calls for service is a proven method of service delivery response (Benton Harbor, Michigan, as an example), and does not diminish response times or service levels.

# Law Enforcement Analysis

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## Community Overview

Policing involves a complex set of activities. Police officers are not simply crime fighters whose responsibilities are to protect people's 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, guaranteeing the movement of pedestrian and vehicular traffic, protecting and extending the rights of persons to speak and assemble freely, and providing assistance for those who need it.

## Walterboro Demographics

When determining the appropriateness of the deployed resources—both current and future—it is important to take into account the demographics of the community.

Walterboro is the seat of Colleton County and is located approximately 50 miles from Charleston, S.C. Walterboro is also a popular commercial and retail destination for the entire area. According to the U. S. Census Bureau, the city's population is approximately 5,400, and has been relatively stable over the last two decades. The stable population, however, does not reflect the substantial influx of commercial and retail traffic that pulses through Walterboro each day. While the residential population is 5,400, the daily population of Walterboro is considered to be much greater, with area/county residents traveling to Walterboro each day. The attraction of Walterboro as a commercial and retail destination has important implications for the WPSD as it deploys resources to meet the demands of both the residential and transient populations.

The racial makeup of the city is roughly 45.2 percent white (included in this total are 48.3 percent of persons reporting to be of Hispanic or Latino origin), 50.5 percent African-American, 0.3 percent American Indian, 1.0 percent Asian. The median household income in Walterboro is \$24,830, which is approximately 45 percent lower than the median household income for the state of South Carolina. From 2006 to 2010, an average of 39.6 percent of Walterboro residents lived below the poverty level, which is more than double the statewide rate of 17.0 percent.<sup>8</sup>

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<sup>8</sup> The figures in this paragraph are taken from the U. S. Census Bureau at <http://quickfacts.census.gov/qfd/states/32/3231900.html>.

## Uniform Crime Report/Crime Trends<sup>9</sup>

As defined by the Uniform Crime Report (UCR), eight major Part I offenses are used to measure the extent, fluctuation, and distribution of serious crime in geographical areas. Part I crimes are the most serious offenses in two categories: violent and property crime. Part I violent crimes are defined as murder, rape, robbery, and aggravated assault; Part I property crimes are burglary, larceny, motor vehicle theft, and arson. As shown in Table 5, in 2011, Walterboro had a UCR Part I violent crime rate (VCR) of 916 violent crimes and a property crime rate (PCR) of 11,994 per 100,000 residents. The violent crime rate in Walterboro is 69 percent higher than the state average and 237 percent (more than double) higher than the national average. The rate of property crime is 307 percent higher than the state average (more than triple) and 412 percent higher than the national average (four times greater). Walterboro has the highest property crime rate and the second lowest violent crime rate of all the jurisdictions shown in the table.

**Table 5: 2011 UCR Crime Comparisons**

Jurisdiction	Population	Violent Crime Rate (per 100,000)	Property Crime Rate (per 100,000)	TOTAL CRIME RATE (per 100,000)
Walterboro	5,461	916	11,994	12,910
Dillon	6,867	1,966	9,262	11,228
Lake City	6,753	1,377	6,930	8,307
Darlington	6,362	1,226	8,079	9,305
Cheraw	5,919	895	6,504	7,400
Chester	5,672	1,622	4,795	6,417
Batesburg-Leesville	5,424	1,125	5,918	7,043
Abbeville	5,298	1,340	2,775	4,115
South Carolina	3,577,275	543	3,908	4451
United States	311,591,917	386	2,909	3295

**Note:** 2011 was the most recent year for which UCR data are available on comparison jurisdictions.

Table 5 shows the crime rates of a number of jurisdictions in South Carolina that are close in population size and demographic characteristics to Walterboro. The analysis is not intended to

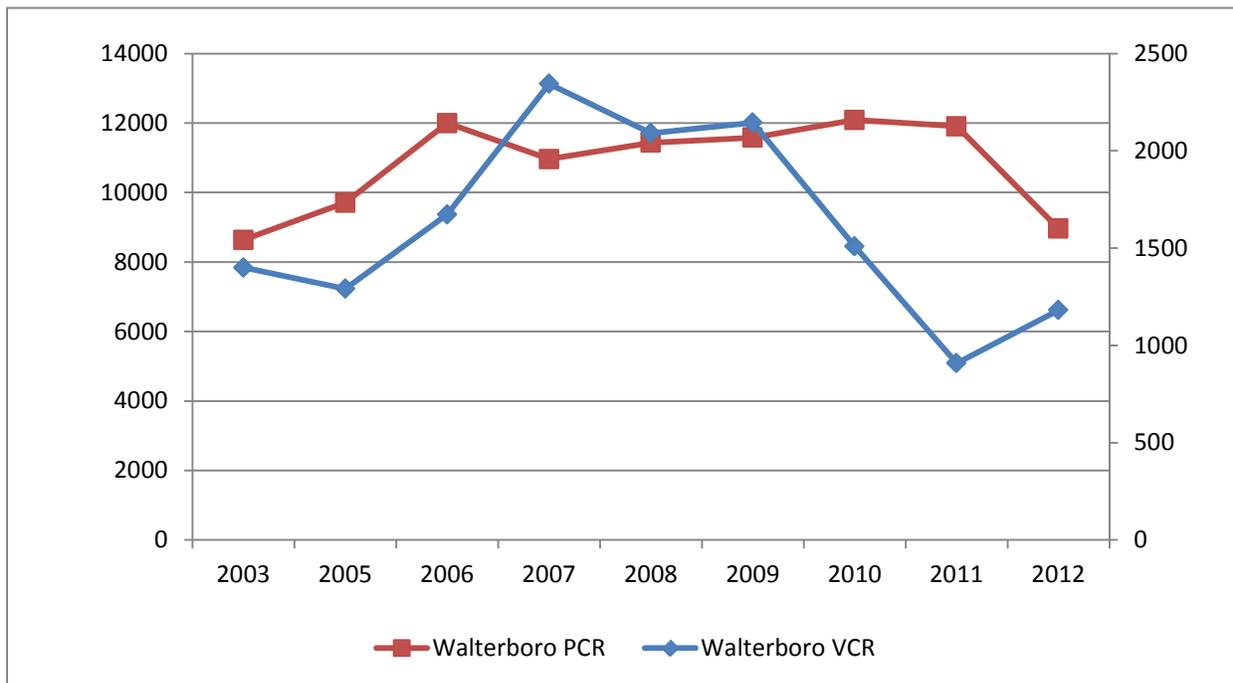
<sup>9</sup> The UCR began in the late 1920s and has been under the jurisdiction of the FBI. Over the years the UCR developed into a broad utility for summary-based reporting of crimes and continues to be a useful tool in reporting, measuring, and comparing crime. By the late 1970s, confronted with validity and reliability issues, the FBI created an “incident-based” reporting system to compliment the UCR. Testing for the “National Incident Based Reporting System” (NIBRS) took place in South Carolina. The new system was approved for general use at a national UCR conference in March 1988. The general concepts, such as jurisdictional rules, of collecting and reporting UCR data are the same as in NIBRS. However, NIBRS goes into much greater detail than the summary-based UCR system. NIBRS includes 46 Group A offenses whereas UCR only has eight offenses classified as Part I offenses. Additional information about NIBRS can be found at the FBI’s website: <http://www2.fbi.gov/ucr/faqs.htm>

compare Walterboro with Dillon or Abbeville, for example, but rather is meant as an illustration of communities in South Carolina and how they compare with respect to rates of crime. The data presented in the table support the observation that Walterboro is a major attraction for the surrounding region, which undoubtedly contributes to the higher rates of crime experienced in the community.

Examination of the data presented in Table 5 indicates that Walterboro has a comparably high crime rate. Population-wise, Walterboro is towards the lower end of the communities cited, but has the highest crime rate of all the communities. The crime rate in Walterboro is nearly four times greater than the national average and three times greater than the state average. The crime experience in Walterboro portrayed in the table has important implications for staffing and deploying police resources in the community. Essentially, the demographic and crime patterns in Walterboro indicate that the WPSD needs sufficient resources to respond to this high rate of crime. Also, the department must be somewhat aggressive in both responding to crime after it happens through effective investigations as well as a robust crime prevention program to stop crime from happening in the first place.

Over the last ten years, the rate of crime in Walterboro has fluctuated (see Figure 10). Violent crime reached a high in 2003, a low in 2005, and appears to be trending downward since 2008. Similarly, property crime in Walterboro has fluctuated over the decade with alternating high and low periods, but no discernible pattern. In totality, it appears that the crime rates in Walterboro fluctuate from year to year but remain relatively high compared to comparable communities as well as the state and national averages.

**Figure 10: Crime Rate, Walterboro, South Carolina**



## Comparisons/Benchmarks

In order to put the WPSD into perspective it is important to compare it with other police departments. The Bureau of Justice Statistics (BJS) publishes periodic reports (Law Enforcement Management and Administrative Statistics, or LEMAS) on the administrative and managerial characteristics of police departments in the United States.<sup>10</sup> Keeping in mind that each community has characteristics that govern the style and size of its police department, these characteristics and comparisons can help assess the relative performance of the WPSD.

The BJS data is helpful in benchmarking the WPSD on several key variables, including per-capita spending on police services, spending per crime, number of sworn personnel per crime, overtime expense, and sworn officers per capita (see Table 6).

On average, the WPSD spends approximately \$405 per capita on police services, substantially more than the average of \$157 reported in the L.E.M.A.S. report. Walterboro's 2011 crime rate of 12,910 serious crimes per 100,000 residents is more than double the benchmark crime rate. Also, as of May 17, 2013 in fiscal year 2013, the WPSD spent approximately \$79,000 on police overtime out of an approximate police personnel payroll of \$1.6 million.<sup>11</sup> This represents approximately 5.0 percent of total salaries paid. This overtime-to-payroll ratio is comparable to the benchmark on police overtime expenses. Lastly, the WPSD employs 22 sworn officers, or 407 officers per 100,000, which, again, is much higher than the average of 160 officers per 100,000 residents from the LEMAS study.

**Table 6: Walterboro Police in Perspective**

Benchmark Area	WPSD	Benchmark	Vs. Benchmark
Per capita police spending	\$405	\$157	HIGHER
Overtime	5%	5%	SAME
Crime rate	12,910	5,000	MUCH HIGHER
Spending per Serious Crime	\$3,850	\$6,700	MUCH LOWER
Officers per capita	407	160	MUCH HIGHER

Overall, the WPSD earns low marks for financial benchmarks. Costs of operations appear high. The Walterboro community spends more than double than the average community of similar size on police services. However, this expense is not translated into more efficiency through a lower crime rate. Similarly, the department does not spend enough per serious crime compared to other communities. This is likely a function of the substantially higher crime rate as opposed to insufficient police spending. The combination of these two measures reflects a less than optimal situation and a seemingly inefficient investment of resources. The community is investing more resources per capita on policing services, but not realizing the return of lower rates of crime.

<sup>10</sup> Bureau of Justice Statistics, *Law Enforcement Management and Administrative Statistics* (2007).

<sup>11</sup> Personnel payroll is determined as the sum of regular, extra, premium, longevity, certification, field training, and workers' comp payments. The "police" portion of the overall public safety budget was based on the ratio of personnel (police/total) and was calculated as 75 percent of total budget.

Caution must be exercised interpreting these measures too narrowly. Crime is a complex social phenomenon with many causes that are beyond the control of the police. Also, the demographics and geography of Walterboro might make it more prone to crime. While the exact variables driving crime in Walterboro are beyond the scope of this report, a prudent conclusion would be that a large investment is being made into public safety and greater returns could be realized. In brief, the department spends more per capita on officers and employs more officers per capita than comparison communities. There is a substantially higher crime rate than expected and the department spends less than comparable communities per serious crime. With the high level of expenses comparable to other communities there is an expectation that services should also be high and crime rates should be low (with more resources to combat problems), but this does not appear to be the case in Walterboro.

The key to operational efficiency, however, is not found exclusively in financial benchmarks. The size and style of a police department and the types of services that it provides are a reflection of the character and demands of that community. The challenge is to determine how many police officers are necessary to meet that demand, and how to deploy those personnel in an effective and efficient manner. The above analysis demonstrates that the WPSD is not leveraging its financial resources financially efficiently in terms of personnel and crime rate. The analysis that follows is an attempt to build upon this discussion and answer the “how many” and “how to deploy” questions that are the essence of police operational and personnel resource decisions.

Our report now turns to the various elements of the WPSD and an assessment of those elements in context with prevailing industry standards and best practices.

## Strategic Management and Planning

*Planning* “People do not plan to fail, they fail to plan”

Strategic management is the process of establishing and managing an organization’s mission. Strategic planning is the process by which an organization focuses its efforts and directs its resources toward accomplishing its mission.

The WPSD lacks a concrete mission statement and lacks focus and direction on two critical areas of operation: crime reduction and community relations. In general, the mission of a public safety organization should be to enhance the quality of life of Walterboro by working with the public and within the framework of the United States Constitution, preserving the peace, reducing fear, and providing a safe environment for its citizens. From a strategic perspective, it appears that the WPSD is struggling to fulfill the presumed mission of the organization. Violent crime, property crime, and the fear of crime are high, and there is a palpable sense of frustration in the community with the WPSD.

On Monday, May 13, 2013, the Walterboro city manager sponsored a meeting with the community and representatives from ICMA. The meeting was originally scheduled to be held in the council meeting room in city hall, but was moved to the public safety garage to accommodate the size of the crowd that numbered about 100 people.

Fourteen citizens volunteered to speak. Their general theme was that crime was THE issue facing the community and there was a belief not enough was being done to stop crime from happening. Speaker after speaker gave individual accounts of criminal incidents describing shootings, drug dealing, gangs, disorderly clubs, and many offered their recommendations for a solution. These solutions ranged from more resources for the police, better relationships among the community and with the police, providing constructive alternatives for the youth of the community (educational, vocational, etc.), and the need for a plan of action to deal with the crime in the community. In addition to the specific issues raised by the community, there seemed to be a perception that the WPSD is not responsive to the community in dealing with these issues. Speaker after speaker identified a problem, articulated a willingness to get involved, and yet expressed frustration at the lack of response, or an inadequate response, to their concerns

Crime is caused by many factors. Over the past century, theories of crime have abounded, and there are many perspectives and schools of thought regarding the nature of crime and why it happens. The use and sale of drugs, availability of guns, gangs, poverty, unemployment, poor education, high residential turnover, poor housing, cultural conflict, and dysfunctional families, have all been associated with crime.

Social disorganization theory suggests that serious crime is a function of social and physical disorder present in a community. First advanced by University of Chicago sociologists Shaw and McKay, social disorganization was defined as low socioeconomic status, high residential mobility, high cultural diversity, poor housing stock, and dysfunctional families. The concept has evolved to define disorder on a continuum, with low-level physical disorder on one end and serious criminal disorder on the other end of the continuum.

**Continuum of Disorder:**

<b>Physical Disorder</b>	<b>Social Disorder</b>	<b>Serious Crime</b>
(Low seriousness)	(Medium Seriousness)	(High Seriousness)
Graffiti	Public Drinking	Violent Crime
Derelect Cars	Noise	Property Crime
Litter	Traffic	
Abandoned Property	Prostitution	
	Drugs	

Serious crimes, therefore, are not isolated events; they are part of a continuum of disorder and part of the fabric of a community. The most well-known articulation of this perspective is the “broken windows” metaphor described by James Q. Wilson and George L. Kelling. Wilson and Kelling’s article “Broken Windows” appeared in a 1982 edition of Atlantic Monthly, and it argued that crime and the fear of crime are products of “broken windows” in a community. Literally, when a property has a broken window and it is not repaired, the broken window sends a signal to people in the community that no one cares about the property and also invites the breaking of more windows and further disrepair of the property. This in turn invites more frequent and serious disorder, inviting people to “hang out,” drink alcohol, use drugs, make noise, be disorderly, and the like because no one is in charge of the area. Eventually, this combination of physical and social disorder will lead to serious criminal activity.

Broken windows are used in the “metaphorical” sense, where any signs of community disorder are the equivalent of a “broken window.” If the disorder is left unaddressed, it signals to the community that there is a lack of control, and sends an invitation for further disorder and serious crime. Thus, from a community perspective, “broken windows,” or signs of both physical and social disorder, are important and visible precursors to serious criminal activity. If left unrepaired, the literal and metaphorical broken windows contribute in an indirect way to crime and the fear of crime in a community.

Communities around the U.S. have taken an aggressive stance in response to “broken windows” and social disorder. From a police perspective, addressing “broken windows” is not only being responsive to community complaints, it will have a direct effect on reducing serious crime in the community.

Closely linked to crime is the fear of crime. Oftentimes the two do not necessarily go together. Studies have shown that the fear of crime is more important to residents of a community than actual crime levels. For example, the quality of life of many elderly residents of a community is sharply reduced by their fear of crime, yet this demographic group is generally the least victimized by crime. Conversely, younger groups in a community have a much less fear of crime but are usually the group with the highest level of victimization. Compounding these perceptions is that strategies to reduce crime are often ineffective at reducing the fear of crime and vice versa.

Looking at the data provided above about the level of crime in Walterboro complicates this matter even further. Crime rates are indeed high in Walterboro. Therefore, the level of fear in the

community, generally a perception of crime, is actually based on the reality of a very high crime rate. Residents have fear, and rightfully so. Adding to this situation is a perceived lack of response on the part of the department. Theoretically, the WPSD could do an excellent job allaying the fears of the community without actually reducing the level of crime, but this approach is not recommended. The WPSD must implement a strategy that reduces BOTH actual rates of crime and the fear of crime in the community. While the targeted outcomes of these strategies are different, the development and implementation of those strategies can follow a similar path.

The implications of the concept of disorder from a police perspective is that the situation calls for renewed and aggressive strategic management and strategic planning directed at fulfilling the fundamental purpose of the organization. The WPSD's mission is to reduce crime and the fear of crime and provide for a safe community. In order to achieve this mission, the WPSD should embrace strategic management and planning. These efforts must be backed with the use of appropriate performance measures, proper organizational alignment, and effective tactics.

## Performance Measures

This strategic focus demands that appropriate measures be developed and tracked to ensure that plans, policies, and programs are effective in achieving the goals of the department. Mark Moore and Anthony Braga (2004) in their article "Police Performance Measures" argue that six general measures are appropriate to evaluate the performance of a police agency. According to Moore and Braga, a police department should 1) reduce crime, 2) hold offenders accountable, 3) reduce the fear of crime and promote security, 4) encourage public-centered crime defense programs, 5) improve traffic safety, and 6) provide essential emergency services. From a strategic management perspective, each of these six broad areas of police responsibility should be part of the police mandate, each of these measures should be measured, and plans and tactics must be created to achieve success in each area.

It is recommended that WPSD establish measures for each of these six categories and that the city leaders hold the department accountable for achieving improvements in each area. While there is no exact measure for each area, it is suggested that the following data as depicted in Table 7 be used to track performance:

**Table 7: Police Performance Measures**

Performance Domain	Measure	Benchmark	Target
<b>Crime reduction</b>	UCR Part I crime rate	SC average	4451 serious crime per 100,000 VC rate – 543 PC rate – 3908
<b>Holding offenders accountable</b>	Crime clearance rate	UCR Part I average Group IV Cities % cases cleared (Less than 10K population)	VC – 58% PC – 19%
	Case Dismissal Rate	Percentage of cases dismissed by solicitor	Code 044 – Dismissal no indictment less than 20%
<b>Fear of crime</b>	Community fear level	Baseline	Decrease under baseline
<b>Public-centered crime defense</b>	Crime prevention programs	Baseline	Increase over baseline
<b>Traffic safety</b>	Traffic accidents and injuries	Traffic Injury Rate (Injury/pop)	Baseline TBD
<b>Providing emergency services</b>	CFS response time and Saturation Index	CFS response time	Less Than 5.0 min. for Priority 1
		Saturation Index	Less Than 60%

These areas of performance become, therefore, the strategic focus of the department. All programs, plans, tactics, and efforts are directed at improving the measures in these areas. Frequent and regular reporting of this information is critical, as is strict accountability for achieving the desired results.

For example, the violent crime rate in Walterboro is high. Thus, from a strategic perspective, reducing violent crime is a paramount goal of the organization. One example we could use is having the department focus on the number of aggravated assaults reported to the police. This category of crime was selected because of the relative frequency of this crime compared to the other crimes (murder, rape, and robbery) in the violent crime category. To improve its performance, the department could first measure and track all aspects of aggravated assault, and then create a response in the form of deployment, tactics, and initiatives aimed at reducing the crime. The results of the deployment, tactics, and initiatives would be monitored continuously to evaluate the success of the efforts. When aggravated assaults decline, programs should continue. If aggravated assaults increase, plans need to be modified immediately in response to the trend.

This approach has been referred to by several different titles. It is commonly known as the “S.A.R.A.” model in community policing (scanning-analysis-response-assessment), or the COMPSTAT model developed in New York City (timely intelligence-effective tactics-rapid deployment-relentless follow-up), or the policy model from the public administration arena (problem identification-policy development-policy implementation-policy evaluation). Regardless

of what this approach is called, it is essentially a strategic approach, articulating the mission of the organization into quantifiable and measurable terms and using those measures to drive the efforts and performance of the entire organization.

Problem-oriented policing is an approach to policing in which discrete pieces of police business, whether crime or acts of disorder, are subject to microscopic examination in the hope that what is learned about each problem will lead to a new and more effective strategy for dealing with it.<sup>12</sup> Within a strategic approach, problem-oriented policing becomes one of the main tactics brought to bear on crime, fear of crime, traffic safety, and other areas, and is the principle vehicle for identifying problems and creating workable solutions.

The problem-oriented approach works within the strategic framework, and is not an isolated police approach to community problems. In other words, the emphasis is on results—the measures of the six categories identified by Moore and Braga— and the police department is responsible and held accountable for success in these areas. Focusing on just a problem-oriented approach would narrow the focus on problems and their solutions, and not necessarily whether or not those solutions had any connection to the overall mission in the first place. In other words, the police can be very effective at addressing problems, but unless the result of that problem solving has an impact on improving one of the six areas of strategic focus, then the effort was wasted. It is not problem solving for its own sake, but problem solving with an overall purpose.

### Recommendation:

17. It is recommended that the six performance domains described here be utilized to track whether or not the mission of the WPSD is being achieved, and it is further recommended that the performance measures be used to monitor the WPSD's efforts and to hold the department accountable for success in these areas.

### Crime Reduction

The first step in reducing crime is the accurate and timely analysis of crime. The department does not have a designated crime analysis unit and no member of the department is specifically assigned as a crime analyst. The department has the ability to determine when and where crime is occurring within the city, but it is essential to develop the capacity to determine why these crimes are occurring. A designated crime analyst would add value to WPSD operations by processing all of the various data collected, identifying trends and patterns, and helping coordinate enforcement operations in the department.

It does not appear that the department routinely creates maps of reported crime or calls for service. The department does not maintain or display hard-copy pin maps displaying recently reported crimes and “hot spots” of criminal activity in the community. ICMA was advised that the department does have electronic mapping capabilities but it is only accessible by investigators.

In order to fulfill the crime reduction mission, the WPSD must:

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<sup>12</sup> Center of Problem-oriented policing, *retrieved at <http://www.popcenter.org/about/?p=whatispop>*

- Identify, train, and support one non-sworn member of the department to serve as the department's primary crime analyst. This can be either a full-time or part-time position.
- Charge the newly designated crime analyst with responsibility for providing investigative and patrol units with timely and accurate data concerning reported crimes, calls for service, traffic safety, etc. The crime analyst should be skilled in using simple GIS mapping software to indicate hotspots of activity. The analyst should regularly meet with crime analysts assigned to other law enforcement agencies within the region.
- Ensure the crime analyst regularly attends and participates in the department's expanded command staff meetings. The analyst should utilize data analysis software to track all UCR Part I crimes on a weekly basis. Seasonal trends over the past several years should be studied. If a specific problem or pattern is identified, the analyst should prepare detailed analyses of data from a particular geographic area. This could, for example, be a detailed analysis of criminal incidents occurring at a particular housing complex. Crime data and incident counts can be linked to individual housing units, and aerial/satellite maps can be distributed for review and discussion. Armed with an accurate analysis of events, the WPSD can develop strategies to reduce crime and disorder. Crime strategies should be reduced to written plans. The plan should be living documents that include a thorough analysis and comprehensive tactics.

Planning is a five-step process:

1. Identify the problem—thorough analysis of crime conditions.

- When are the crimes occurring? Days, tours, hours, most common eight-hour, four-hour periods. Compared to last week/last four weeks/YTD. Narrowing the time of occurrence allows for easier and more effective deployment.
- Where are the crimes occurring? Intersection, cluster, landmark, park, etc. The better you define where, the easier it is to deploy resources.
- Who is doing the crime? Are there any patterns of similar perps/locations/weapons?
- How are the crimes being committed? For example, are felony assaults "club," DV, or gang-related, if at all?
- What are the underlying conditions that are driving the crime?
- Who are the victims, and what is their relationship to the crime, perps, and/or location?

The analysis should be comprehensive and complete enough to dictate resource deployment. It should not be filled with useless information.

2. Develop a sound strategy to address crime as dictated by the analysis. Below is information that might be used as successful tactics to address different categories of crime. Not all of them will be relevant to every crime condition, but they will be helpful in designing a strategy.

### Aggravated Assault

- Ensure a thorough preliminary investigation is conducted. Collect evidence, secure witnesses, canvass, etc.
- Track 911 CFS that report gunshots.
- Visit and conduct inspections of bars and clubs frequently. Ensure officers are properly trained. Record license plates. Observe patrons entering, exiting, or denied entrance. Conduct vehicle safety checkpoints in the vicinity of the locations at high volume days and hours. Deploy portable lights. Get intelligence on parties before they happen. Work with owners/bouncers to prevent incidents.
- Implement a vigorous domestic violence program.
- Track gang members.
- Conduct enforcement in the vicinity of problematic locations identified through intelligence.

### Burglary

- Thorough preliminary investigations by patrol.
- Know recidivist, parolees, wanted, warranted perps. Where are they and who is looking for them? This includes both burglars arrested and those that reside in the community.
- Pawn shop/second hand dealers/other fencing locations: number in the city, number visited in last 28 days, patrons, history, what is the process to monitor and respond?
- Collect forensic evidence at the scene of all burglaries, if present.
- Truancy enforcement.
- Work with property managers to enforce trespass laws.
- Establish a proactive crime prevention program.
- Develop a tactical plan to respond to in-progress burglaries.
- Work with private security.
- Conduct stolen property sting operations.
- Conduct directed patrol at the locations of prior burglaries.
- Examine alarm company employees.

3. Implement the plan. Once the exact nature of the crime problem is known, and the tactics identified, the plan must be executed rapidly. Do not wait for more crime to occur. Never put the department in a position where the failure to act results in more crime occurring. Act swiftly, act decisively—but analyze before acting.

4. Evaluate the effectiveness of the plan. Measure the effectiveness of the strategy every day. If the street crime team is supposed to perform direct patrols in burglary-prone locations,

then the department should know on a day-to-day basis how this is being accomplished. Don't leave it up to chance. Develop the administrative means to capture the activities performed. Compare the results of this effort with the crime as it occurs.

There also must be a departmentwide evaluation of the success and failure of these efforts. Planning meetings and command staff meetings are necessary, indeed critical, to a department's ability to operate a performance-based management system and to actually use data to inform its most important crime fighting and administrative decisions. The WPSD must begin regular and frequent command staff meetings attended by supervisory personnel to evaluate crime, disorder, and fear of crime data and evaluate the implementation of the overall crime reduction strategy.

5. Readjust the plan if necessary. Through close monitoring it should become apparent if the strategy laid out to address the crime problem is working. If it is, keep the pressure on. If it isn't, change course and develop a new strategy based upon the readjusted analysis. If it was effective, but crime was displaced to another area, then move to that area and start again.

## Holding Offenders Accountable

The next major area of focus should be holding offenders accountable for their conduct. Regardless of whether crime decreases or not, people that commit crimes in Walterboro must be held accountable for their actions. The two recommended measures in this area are clearance rates and warrant dismissal rates. Clearance rate is discussed in greater detail under the section on the Investigations Division, but is defined as the ratio between the number of crimes reported compared to the number of arrests made related to those reports. Essentially, it is a measure of how successful the WPSD is at identifying and apprehending the perpetrators of crime in the community. Clearance rate is calculated as a percentage and can easily be tracked for the department as a whole. It is recommended that the national averages for communities of similar size as Walterboro be used to evaluate the success of the WPSD.

Holding offenders accountable also implies that they will be prosecuted. Anecdotal reports from both the community and the officers indicated that the Solicitor's Office does not prosecute criminal cases brought by the WPSD vigorously and a "revolving door" of justice exists in the community. The focus of this assessment is not the court process; however, documents obtained from the WPSD on warrant dispositions indicate that greater scrutiny must be paid to this issue. In calendar year 2013, almost 50 percent of disposed warrants were dismissed without indictment. There are many factors associated with accepting and dismissing cases for prosecution (lack of evidence, uncooperative witnesses, heavy caseload, etc.), but there must be a coordinated effort to secure the best possible cases, therefore holding offenders accountable for their conduct. A very high dismissal rate, as these data indicate, might signal substandard police processes that can be resolved through training and better management. It is recommended that the WPSD work closely with the Solicitor's Office to identify the root causes of this seemingly high dismissal rate and develop the policies, training, and management processes to improve.

## Recommendation:

18. The WPSD should work closely with the Solicitor's Office to identify the root causes of a seemingly high dismissal rate and develop the policies, training, and management processes to improve.

## Fear of Crime

Fear of crime is an important factor in the quality of life in a community. Reducing the fear of crime is perhaps the most important function of a police organization. Responsiveness, both to emergency situations and through routine practices is essential. The WPSD must develop a robust community relations strategy that improves its responsiveness to the public. Responding to incidents after-the-fact is no longer sufficient. The organized community is demanding closer and more frequent contact with the department. It appears that the department, however, has been reluctant to engage the community in a systematic way. It is recommended strongly that a coordinated and thorough community relations strategy be implemented by the WPSD.

The centerpiece of this strategy should be the creation of a "Public Safety Council" comprised of members of the community who would meet regularly with the director. This council would have a board, a regular monthly meeting, with an agenda, action items, an open forum for public input, as well as a process for identifying and resolving issues raised by the community. Under the umbrella of this group, subcommittees could be established that work with specific organized groups in the community: clergy leaders, youth groups, civic groups, etc.

In addition to regular meeting between the community and department a mechanism must be created that keeps the community informed of crime and public safety trends. Social media (Facebook, Twitter, etc.) can be leveraged to keep the public informed. It is understood that not all information would be made available, but keeping the public "in the loop" has an important role in both empowering people to get involved and allays their fears at the same time. Being kept in the dark about crime trends and public safety issues exacerbates fear and reinforces a perception that the WPSD is not responsive to community concerns.

## Public-Centered Crime Defense (Crime Prevention)

The community must become an active partner in defending itself. Eliminating the opportunities for crime and taking common sense measures to prevent crime from occurring must be embraced. The WPSD cannot do it alone and must rely on the active participation of the community.

Anecdotal accounts were heard on numerous occasions that members of the community are resistant to crime prevention. People believe that leaving valuables in their vehicles, or their doors unlocked, is acceptable. This mindset needs to change and the WPSD needs to be more aggressive in promoting an anticrime message with citizen crime prevention as the theme of this message. The community officer must receive the necessary training to conduct commercial and residential security surveys and aggressively promote crime prevention of homes, businesses, vehicles, personal property, and personal safety.

## Traffic Safety

One of the major responsibilities of the WPSD is traffic safety. Traffic enforcement and providing a visible presence on the roads in Walterboro is one of the core roles of the department. The WPSD should track the number of traffic accidents, their locations/times/causes/etc., and use this information to develop a strategy to reduce these accidents. The process is similar to the one used to reduce crime: a thorough analysis of the events, developing the plan of action based on this information, and then evaluating the success of these efforts in a regular and in on-going fashion.

## Emergency Services

Regardless of the outcome of the crime prevention efforts identified above, when emergency strikes the public expects a swift and complete response. The WPSD is designed to provide that response and several measures need to be tracked to ensure that timely response is taking place. Response time is a key indicator in this area. Regrettably, as the data analysis section of this report demonstrates, the WPSD earns low marks in the entire tracking process. Unable to document, measure, and track calls for service (CFS) is a major shortcoming of the WPSD and immediate steps must be taken to rectify this situation. A later discussion on dispatch and communication is intended to address the major issues in this area, and within this context, allow the WPSD to track more efficiently the level of emergency services it provides.

Strategic management and planning requires that the WPSD create both the plans and strategies to execute as well as the processes to ensure collection of accurate data to identify the problems and evaluate the success of its efforts. Currently, it appears there is no planning, no mission, and no direction in the WPSD. Compounding this lack of strategic focus is a perception on the part of the community that the department is not responsive to its concerns. Both of these situations need to be addressed head-on and the department must immediately embrace a strategic orientation towards crime and community relations. The following are general tips for strategic management that have been implemented successfully in other departments:

- Hold command staff meetings attended by supervisors assigned to all operational units. Command staff meetings should follow a standardized agenda. The agenda should be circulated in advance of the meeting.
- Review and discussion of patrol operations, investigations and case updates, traffic enforcement operations, crime prevention, and professional standards and training updates should always be included on the command staff meeting agenda and should be presented in the same order at every meeting. Minutes should be recorded and maintained for appropriate follow-up at subsequent meetings. These command staff meetings should also include a post-meeting recap in the form of a memorandum that is distributed throughout the department. This ensures accountability and follow-up and helps to convey goals and strategies. In addition to identifying when and where events (such as crimes and traffic accidents) are occurring, the analysis and discussions at these meetings should examine why they are occurring.

- Command staff meetings need to focus, among other things, upon monthly overtime expenditures. The department needs to: a) analyze when and why overtime costs are incurred, and b) develop a specific overtime management/reduction plan. Results of these analyses should be shared with city management.
- In order to optimize the discussions and analysis that take place at these meetings, it is recommended that the department's performance 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:

- The total number of training hours performed, type and total number of personnel trained
- The type and number of use of force reports prepared, personnel involved, time and place of occurrence, and general description of circumstances
- The geographic location (i.e., zone) and time of all arrests
- The geographic location and time of citations issued
- The type and number of civilian and internal complaints (and dispositions)
- The type, number, location, and time of civilian vehicle accidents
- The type, number, location, and time of department vehicle accidents, both "at fault" and "no fault" accidents
- The type, number, location, and nature of all firearms discharges
- 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.)
- 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 WPSD.

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 communicated to, understood by, and acted upon by all members of the department.

The department should encourage accountability among patrol supervisors. Patrol supervisors should have an opportunity to "take ownership" for a particular "temporal" area of the community (time of day) and be held personally accountable for the development of community policing efforts and effective crime-fighting strategies in that shift.

It is recommended that the department utilize a standard template to convey pertinent performance information to city 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 city officials agree to include. Aggregate data should be broken down and fully analyzed whenever possible. For example, the department must continually report who is accumulating overtime, when, and why?

The exact list of performance indicators should be determined by the chief and city officials. It is recommended that the six general areas of performance are included in this evaluation. The important thing is that: 1) regular meetings take place, 2) that timely and accurate performance information is conveyed on a regular basis to city officials, and 3) that performance discussions follow a uniform/standardized template or format.

## Operations Division

The WPSD provides the community with a full range of police services, including responding to emergencies and calls for service, performing directed activities, and solving problems. As public safety officers, the sworn personnel provide a dual role of police and fire service. Currently the Operations Division is commanded by a captain and includes only uniform patrol. The proposed reorganization would put all field operations in this unit (patrol, suppression, and investigations) and be commanded by the Assistant Chief.

### Patrol Staffing and Deployment

Uniformed patrol is considered the backbone of policing. Bureau of Justice Statistics indicate that more than 95 percent of U. S. police departments roughly equal in size to the WPSD provide uniformed patrol. Officers assigned to this important function are the most visible members of the department and command the largest share of departmental resources. Proper allocation of these resources is critical to having officers readily available to respond to calls for service and to provide law enforcement services to the public.

#### *Deployment*

Some police administrators suggest that there is a national standard for the number of officers per thousand residents, but this is not the case. The International Association of Chiefs of Police (IACP) states that ready-made, universally applicable patrol staffing standards do not exist. Furthermore, ratios such as officers-per-thousand population are inappropriate to use as the basis for staffing decisions. An article on this topic published in *Public Management* concludes, “A key resource is discretionary patrol time, or the time available for officers to make self-initiated stops, advise a victim in how to prevent the next crime, or call property owners, neighbors, or local agencies to report problems or request assistance. Understanding discretionary time, and how it is used, is vital. Yet most police departments do not compile such data effectively. To be sure, this is not easy to do and, in some departments may require improvements in management information systems.”<sup>13</sup>

Essentially, “discretionary time” on patrol is the amount of time available each day during which officers are not committed to handling calls or other demands from the public. It is discretionary in that the officer can use his or her discretion about how to best use this time to address problems in the community and be available in the event of emergencies. When there is no discretionary time, officers are entirely committed to service demands, do not have an opportunity to address problems that do not arise through 911, and may be unavailable in times of a serious emergency.

The lack of discretionary time indicates a department is understaffed. Conversely, when there is too much discretionary time officers are idle. This is an indication that the department is overstaffed.

Staffing decisions, particularly in patrol, must be based on actual workload, defined as the time required to complete essential activities. The actual workload must be determined first and then

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<sup>13</sup> John Campbell, Joseph Brann, and David Williams, “Officer-per-Thousand Formulas and Other Policy Myths,” *Public Management* 86 (March 2004): 22–27.

the amount of discretionary time. Only then can staffing decisions be made consistent with the department's policing philosophy and the community's ability to fund it.

Understanding actual workload requires reviewing total reported events within the context of how the events originated, such as through directed patrol, administrative tasks, officer-initiated activities, and citizen-initiated activities. Doing this analysis allows the activities that are really "calls" to be differentiated from other types of activities. Understanding the difference between the various types of events and the resulting staffing implications are critical to determining deployment needs. This portion of the study looks at the total deployed hours of the police department with a comparison to the time being spent to currently provide services.

From an organizational standpoint, it is important to have uniformed patrol resources available at all times of the day to deal with issues such as proactive enforcement and community policing. Patrol is generally the most visible and most available resource in policing and the ability to harness this resource is critical for successful operations.

From an officer's standpoint, once a certain level of CFS activity is reached the officer's focus shifts to a CFS-based reactionary mode. Once a threshold, or saturation-point, is reached, the patrol officer's mindset begins to shift from a proactive approach in which he or she looks for ways to deal with crime and quality-of-life conditions in the community to a mindset in which he or she continually prepares for the next CFS. After saturation, officers cease proactive policing and engage in a reactionary style of policing. Uncommitted time is spent waiting for the next call. The saturation threshold for patrol officers is believed to be 60 percent.

In general, a "Rule of 60" can be applied to evaluate patrol staffing. The Rule of 60 has two parts. The first part maintains that 60 percent of the sworn officers in a department should be dedicated to the patrol function, and the second part maintains that no more than 60 percent of patrol time should be "saturated" by workload demands from the community.

#### *Rule of 60 – Part 1*

According to the WPSD personnel listing dated 4/2/2013, patrol in the WPSD is staffed by four sergeants, four corporals, and four patrol officers assigned to a CFS response capacity. These twelve of the total of twenty-three sworn officers represent 52.2 percent of the sworn officers in the WPSD. This indicates that the current deployment of officers to the patrol function is not balanced with the other personnel assignments in the organization, and is understaffed. The low number of personnel on road patrol is a function of several vacancies caused by a sudden loss of personnel in the recent past. Numerous officers left the WPSD for employment in other law enforcement agencies in the area. The WPSD is in the process of filling those vacancies and there are two officers currently in training at the SCCJA. At full strength the WPSD organizational chart calls for sixteen officers/supervisors assigned to patrol, with twenty-seven total personnel assigned to primarily police duties, which would balance the department appropriately according to this benchmark.

#### *Rule of 60 – Part 2*

The second part of the Rule of 60 examines workload and discretionary time and suggests that no more than 60 percent of time should be committed to calls for service. In other words, ICMA suggests that no more than 60 percent of available patrol officer time be spent responding to the

service demands of the community. The remaining 40 percent of the time is the discretionary time for officers to be available to address community problems and be available for serious emergencies. This Rule of 60 for patrol deployment does not mean the remaining 40 percent of time is downtime or break time. It is simply a reflection of the point at which patrol officer time is saturated by CFS.

This ratio of dedicated time compared to discretionary time is referred to as the saturation index (SI). It is ICMA's contention that patrol staffing is optimally deployed when the SI is slightly less than 60 percent. An SI greater than 60 percent indicates that the patrol manpower is largely reactive, and overburdened with CFS and workload demands. An SI of somewhat less than 60 percent indicates that patrol manpower is optimally staffed. SI levels much lower than 60 percent, however, indicate patrol resources that are underutilized and signal an opportunity for a reduction in patrol resources or reallocation of police personnel.

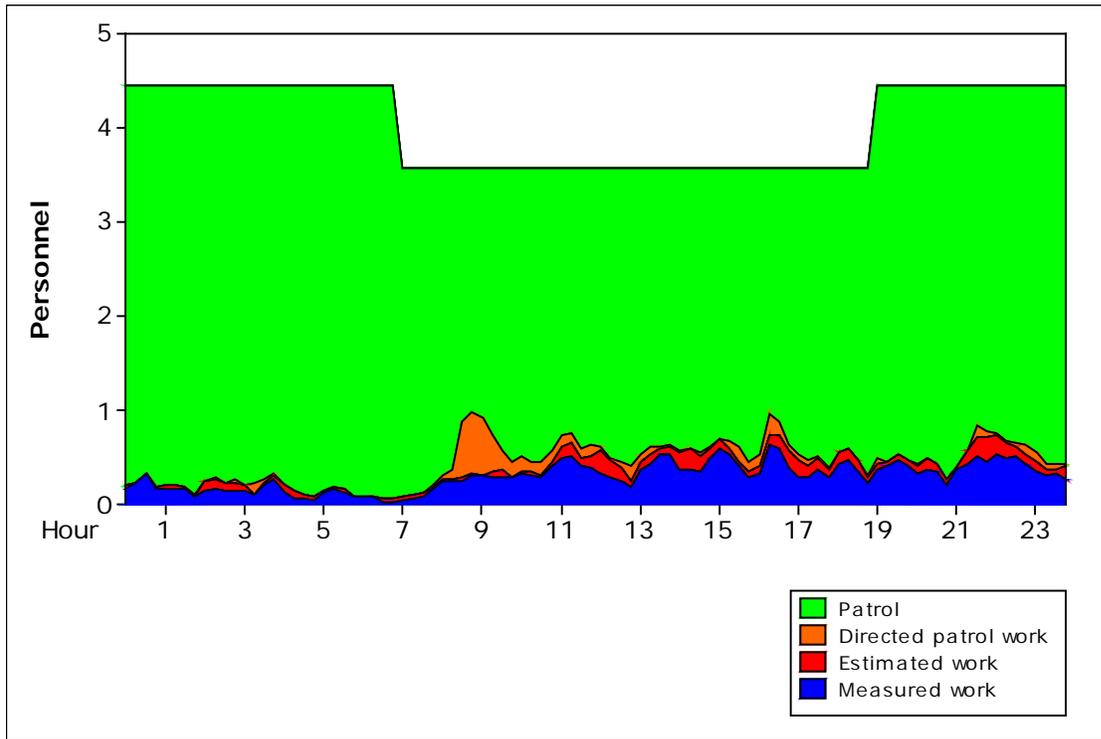
Departments must be cautious in interpreting the SI too narrowly. For example, one should not conclude that SI can never exceed 60 percent at any time during the day, or that in any given hour no more than 60 percent of any officer's time be committed to CFS. The SI at 60 percent is intended to be a benchmark to evaluate service demands on patrol staffing. If SI levels are near or exceed 60 percent for substantial periods of a given shift, or at isolated and specific times during the day, decisions should be made to reallocate or realign personnel to reduce the SI to levels below 60. Lastly, this is not a hard-and-fast rule, but a benchmark to be used in evaluating staffing decisions.

The ICMA data analysis in the second part of this report provides a rich overview of CFS and staffing demands experienced by the WPSD. The analysis here looks specifically at patrol deployment and how to maximize the personnel resources of the WPSD to meet the demands of calls for service while also engaging in proactive policing to combat crime, disorder, and traffic issues in the community.

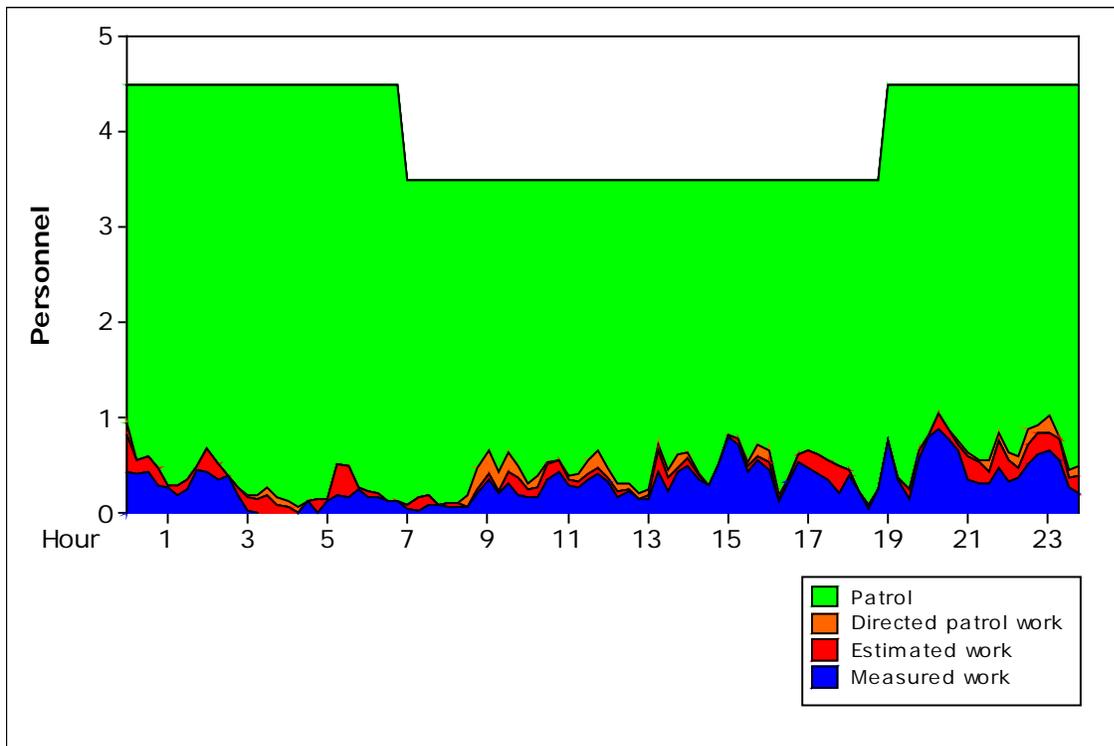
Figures 11 to 14 and Table 8 represent the workload and deployment levels of the WPSD for eight weeks in the summer from July 6 through August 30, 2012, and eight weeks in the winter from January 4 through February 28, 2013.

Walterboro Public Safety's main patrol force includes patrol officers, corporals, and sergeants. The department deployed an average of 4.0 officers per hour during the 24-hour day in summer 2012 and 3.8 officers per hour during the 24-hour day in winter 2013. The average workload during these periods was less than 0.5 officers per hour, with a maximum workload of only 37 percent of deployment. Similarly, the average saturation index (workload/deployment) was approximately 11 percent during the periods studied. These data demonstrate very little demand for police services in Walterboro, meaning the WPSD has a surplus of resources to handle the demand.

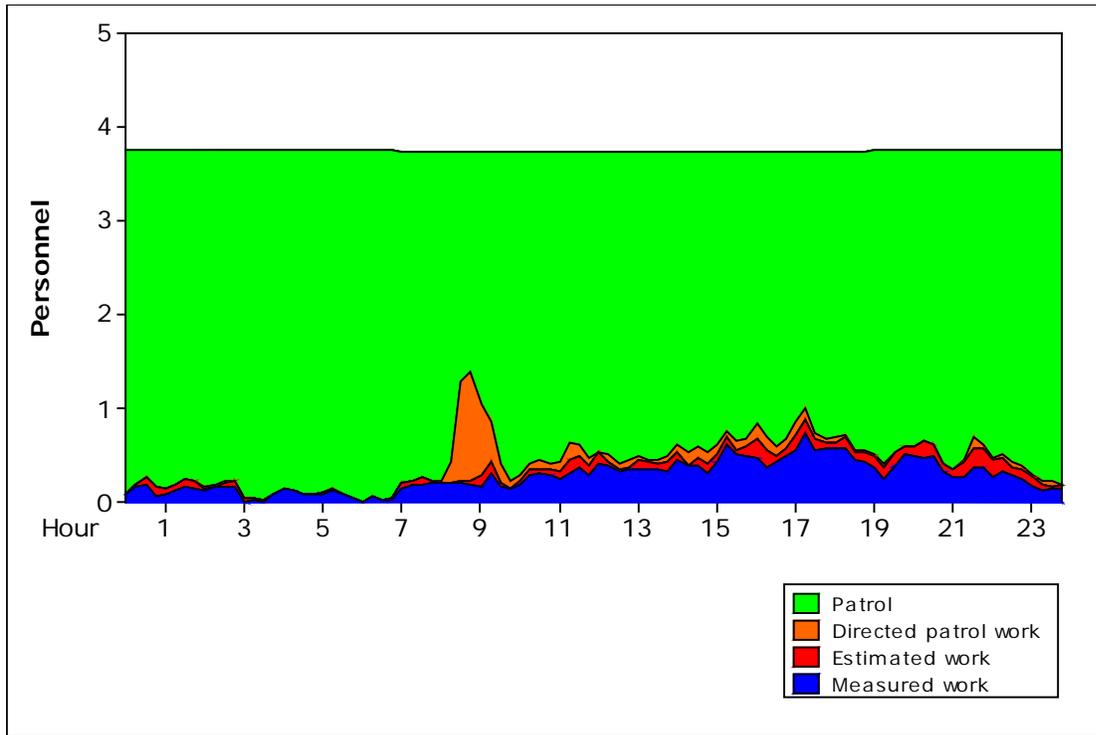
**Figure 11: Deployment and All Workload, Weekdays, Summer 2012**



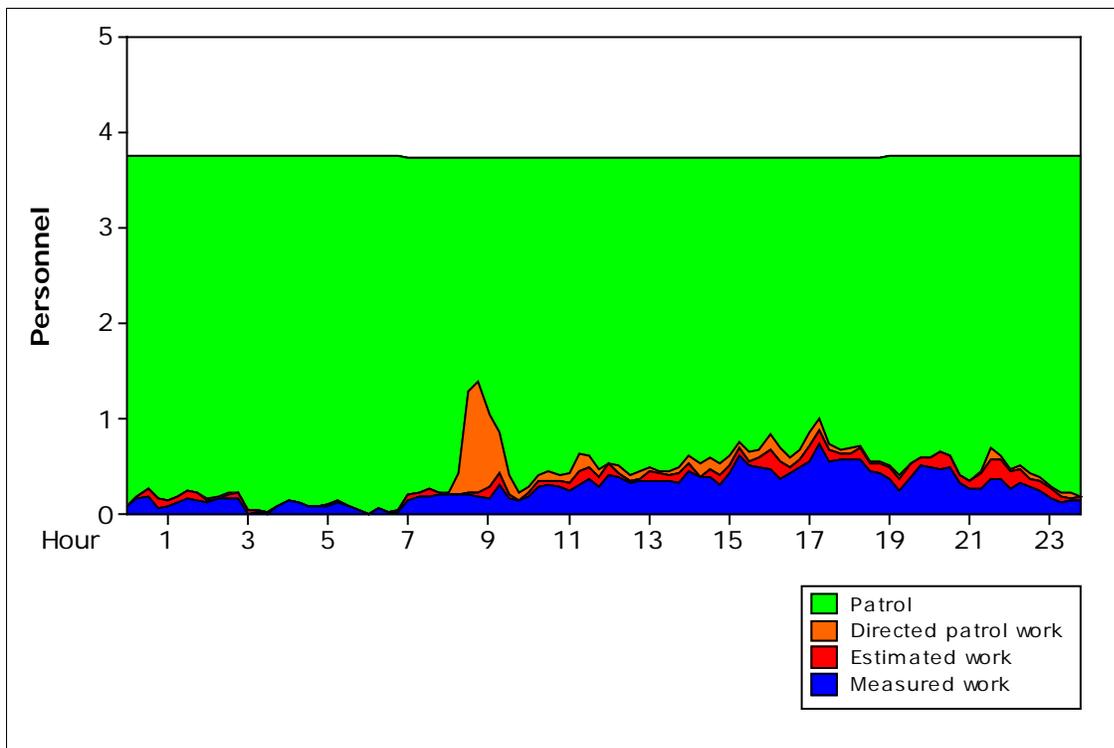
**Figure 12: Deployment and All Workload, Weekends, Summer 2012**



**Figure 13: Deployment and All Workload, Weekdays, Winter 2013**



**Figure 14: Deployment and All Workload, Weekends, Winter 2013**



**Table 8: Workload and Deployment Summary**

	Summer 2012		Winter 2013	
	Weekday	Weekend	Weekday	Weekend
Average workload*	0.4	0.4	0.5	0.4
Saturation index (SI)	11	11	11	9
Peak SI	27	23	37	29
SI peak time	8:45 a.m.	3:00 p.m.	8:45 a.m.	9:15 a.m.

Note: \*Officers occupied per hour, on average.

As can be seen from Table 8, there are more than ample resources in the WPSD to meet the demand for police services from the community. The data analysis indicates that on average only 11 percent of the available resources are consumed each hour. The second part of the Rule of 60 contemplates that no more than 60 percent of resources be committed to workload; therefore, the WPSD is safely within that range. At the same time, caution must be exercised when interpreting these data. The WPSD has a fundamentally flawed communications and dispatch system and little reliability can be placed on the information the system produces. The WPSD does not record traffic stops, nor does it record time spent off patrol for administrative reasons, thus the saturation index is likely to be much greater than the figure reported. Anecdotal evidence suggests that officers on patrol are not overwhelmed by CFS demand so it is likely that even considering the workload data missing from the records the WPSD has more than enough resources to handle the demand from the community.

Considering the high incidence of crime, particularly violent crime, as well as the dual nature of their responsibilities as both police officers and firefighters, it is our view that the WPSD should be minimally staffed with five sworn officers in each road patrol squad (one sergeant, one corporal, and three officers). With four officers (three officers and one supervisor) assigned to each road patrol shift as minimum staffing, there should then be sufficient resources available to meet the public safety needs of the community.

### *Schedule and Staffing*

To staff patrol, the WPSD employs a two-platoon (foxtrot and golf), two-squad, twelve-hour shift schedule, with a two-month rotation from day shift to night shift and back again. Each platoon works the following cycle: three days on duty, two days off, two days on, three days off, two days on, two days off, and then the cycle repeats, so officers work for seven days each fourteen-day cycle. The twelve-hour shifts are day, 7:00 a.m. to 7:00 p.m., and night, 7:00 p.m. to 7:00 a.m. There is no shift overlap. After four cycles the platoons switch from days to nights, and vice versa. Each platoon has two squads, supervised by one sergeant and one corporal who work the same schedule as the officers.

The WPSD has several vacancies due to recent separations from the department. These vacancies are currently in road patrol and all squads are understaffed. Two of the squads only have two sworn officers assigned, which has numerous operational disadvantages. With only two officers assigned to patrol, all proactive policing ceases. Proactive policing implies that officers will be aggressive in their search for criminal activity and disorder. Uncovering such activity is likely to

lead to arrests; ordinarily a good outcome. But with only two officers assigned to patrol, when one of them makes an arrest, the other is forced to cover patrol alone. The result is that officers on patrol tend to avoid situations where they will be taken off the street and they become reticent to engage in proactive policing. Filling these vacancies must be a high priority for the WPSD. There are two officers in training and assigning them to road patrol upon graduation will provide welcome relief to the shorthanded squads. We believe also that the reorganization and restructuring will greatly improve this situation.

The available literature on shift length provides no definitive conclusions on an appropriate shift length. A recent study published by the Police Foundation examined eight-hour, ten-hour, and twelve-hour shifts and found positive and negative characteristics associated with all three options.<sup>14</sup> ICMA contends that the length of the shift is secondary to the application of that shift to meet service demands. The twelve-hour shift schedule used by the WPSD offers both advantages and disadvantages.

The advantage of this shift is that it separates the patrol function into evenly staffed platoons. As the platoons rotate in and out of their schedule, the WPSD has a uniform and predictable deployment of officers on patrol at all times. The twelve-hour configuration also works evenly into the twenty-four-hour day and there are not excessive overlaps in staffing.

While each shift length has advantages and disadvantages, one of the common disadvantages of any shift is rotation from day to night. If a shift maintains consistent start and end times it is less disruptive on the lives of the officers working it. However, rotating start times from day to night has been found to be the most counterproductive arrangement and the one with the most negative personal side effects to the officers working the rotation. The damaging part of shift work, therefore, is not length of shift, but the rotation from night to day and vice versa. Officers assigned to road patrol did not raise rotation as a drawback. In fact, officers welcomed the switch and avoiding getting “stuck” on one particular shift or another. ICMA does not recommend modifying the current rotation; however, a regular evaluation of officer well-being should be considered as part of the overall management of road patrol in the WPSD.

### *Technology on Patrol*

Currently, officers on patrol in the WPSD are required to return to the station to prepare and submit reports since the in car computers cannot handle reports. Booking reports must be hand written then be entered into required record-keeping systems for further processing. This process is highly inefficient. Technology is available that would permit the department to automate the entire process from beginning to end. This will improve record keeping, would improve the ability to search records, and would save time and costs. It is recommended that the department explore automated report-writing alternatives and embrace the evolution from the handwritten system.

Each road patrol vehicle in the WPSD contains radar and in-car video. The department is evolving from a manual transfer to wireless transfer of data from the car to the main department servers for storage. This is a smart use of technology and continued implementation should be encouraged as

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<sup>14</sup> Karen L. Amendola, et al, *The Shift Length Experiment: What We Know about 8-, 10-, and 12-hour Shifts in Policing* (Washington, DC: Police Foundation, 2012).

new cars come on line. However, two key pieces of technology are missing from patrol operations: license plate readers (LPR) and automated external defibrillators (AEDs).

Recent research has shown that license plate readers are very effective tools for apprehending auto thieves and recovering stolen vehicles. They cost around \$20,000 to \$25,000 per device, and can check license plates about ten times faster than an officer manually checking license plates. Their use can result in double the number of arrests and recoveries of stolen vehicles.<sup>15</sup> Agencies that employ LPR technology report that over the next five years they plan on increasing the deployment of LPR to equip approximately 25 percent of their patrol cars. It is strongly recommended that the WPSD implement this technology and install an LPR in at least one marked patrol car. Adding LPR technology is a better and more cost-effective way of deploying personnel and technology to reduce auto crime.

An automated external defibrillator, or AED, is a portable electronic device that automatically diagnoses the potentially life threatening cardiac arrhythmias of ventricular fibrillation and ventricular tachycardia in a person. It is then used to treat them through defibrillation, the application of electrical therapy, which stops the arrhythmia and allows the heart to reestablish an effective rhythm. With simple audio and visual commands, AEDs are designed to be simple to use for first responders, and their use is taught in many first aid, first responder, and basic life support (BLS) level CPR classes. The deployment of AEDs in marked police vehicles in Walterboro would greatly enhance the life-saving capabilities of the department. These inexpensive (less than \$2,000 each unit) and easy-to-use devices would be a tremendous asset to WPSD and their purchase and deployment is strongly recommended.

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<sup>15</sup> Police Executive Research Forum study of LPR effectiveness in the Mesa, Arizona, Police Department.

## Investigations Division

The WPSD Investigations Division (ID) provides investigative follow-up on cases and information submitted by uniformed patrol. The ID also serves as a primary point of contact with area law enforcement agencies at the local, state, county, and federal levels. At the time of the ICMA site visit, the ID was commanded by a captain, and staffed with one sergeant, two corporals, and one police officers. Under the new table of organization this unit would be commanded by a lieutenant and staffed with a corporal, two PSO investigators, and a victim's advocate.

### Workload

Walterboro is a relatively high-crime community. With a 2011 FBI Uniform Crime Report Part I Crime Index of 129.1 crimes per 1,000 citizens, Walterboro ranks nationally as a high-crime community among cities of all types.

During 2012, the ID was assigned 374 cases of all types for active investigation. As is typical of criminal investigations, the vast majority of the ID caseload comes from patrol division referrals and consists of retroactive follow-up. These 374 cases were assigned to the two investigators (sergeant and corporal) on the team. According to "Police Central," the records management system used by WPSD, 19.3 percent of the cases were violent crime cases (72 of 374), 66.8 percent were property crime cases (250 of 374), and 14 percent were public order cases (52 of 374). The breakdown of these case assignments indicates a judicious use of investigative resources, with investigations focusing on the appropriate distribution of criminal offenses.

Generally, ICMA suggests that roughly 120 and 180 cases be assigned per investigator per year, resulting in about 10 to 15 new cases per month for each investigator. By all appearances, the investigative team's workload is manageable and the team is adequately staffed with two investigators. Other modifications to the personnel assignments in this division are recommended in this report, but the current assignment of two investigators for criminal investigations is warranted.

### Clearance Rates

Case clearance rates are a common method of evaluating the efficiency and effectiveness of investigative units. Clearance rate is calculated by comparing the total cases received by the agency versus cases cleared. Table 9 compares the WPSD's reported clearance rate for the calendar year 2012, with the national clearance rate from 2011 (the latest available data).

**Table 9: WPSD Case Clearance**

UCR Part I Crime	WPSD Clearance	National	Difference
	Rate (2012)	Clearance Rate (2011)	
Homicide	NA	64.8%	NA
Rape	NA	40.3%	NA
Robbery	61.1%	28.2%	+32.9%
Aggravated Assault	83.7%	56.4%	+27.3%
Burglary	18.6%	12.4%	+6.2%
Larceny	56.1%	21.1%	+35.0%
Auto theft	11.5%	11.8%	-0.3%

As can be seen from the table, with the exception of auto theft, the WPSD’s clearance rates overwhelmingly exceed the national rates. From these data, it would appear the division, and the department in general, is doing an excellent job of investigating crime.

### Case Management and Performance Measures

Procedure 04-026 of the WPSD Policy and Procedure Manual documents the procedure for criminal investigations. According to this procedure, all felonies, forgeries, burglaries, property crimes over \$1,000, and crimes against persons with injuries are assigned to the ID for follow-up investigation if the case is not already closed by patrol. Furthermore, patrol officers are responsible for investigations of property crimes less than \$1,000, traffic-related offenses, and crimes against persons without physical injury. Patrol officers are also responsible for conducting preliminary investigations at the scene of the offense.

The procedure details specific steps and general policy directives for follow-up criminal investigations; and the policy appears sound. As noted above, the WPSD enjoys very high clearance rates and the distribution of cases for investigation appears appropriate and managed well. There are several recommendations that can be offered, however, that can improve an already high performing function.

### Recommendations:

19. Supplement statutory criteria for case assignment with “solvability” factors. Procedure 04-026 outlines solvability factors in Section IV. These factors (named, identity, address/location of suspect, traceable/identifiable evidence, etc.) should be the first-order criteria for assigning a case for investigation. Essentially, when patrol units conduct a preliminary investigation that leads to tangible information implicating a suspect, but not a summary arrest, the case should be forwarded for follow-up investigation.
20. Assign the ID lieutenant to review all cases and determine which ones, based on solvability factors, get assigned for follow-up, and which ones get closed and/or forwarded to patrol.

21. The Patrol / Suppression Commander should be the point-person between the ID lieutenant and patrol units for case follow-up. At the time of this report several dozen cases from 2012 that were forwarded to patrol were still open. A more thorough system of oversight and case management involving the patrol commander would ensure a more timely resolution to cases assigned to patrol.
22. The WPSD needs to make a greater investment in technology with respect to criminal investigations. For example, inspection of the case files generated by the ID reveals a meticulous and well-ordered system for case management. These case files, however, are completely paper-based and stored in a stand-up file cabinet. Retrieving and searching these files is cumbersome and needs to be automated. All case files should be digitized and stored electronically. This will undoubtedly enhance the current process of investigations in the WPSD.
23. The clearance rates demonstrate an effective investigations process. However, these data were calculated by ICMA and are not used regularly by the WPSD. Clearance rate is an important benchmark to evaluate the performance of the department as a whole and the ID specifically, but the information is largely ignored. Clearance rates should be tracked more rigorously, and should be used to assess the performance of individual investigators. Regular and frequent evaluation of the number of cases assigned to investigators and the outcome of those cases should be part of the regular management of the investigative function in the WPSD.
24. A more robust system of criminal intelligence and crime analysis needs to be embraced. The ID is performing well, but the approach is almost entirely reactive. The information collected day-to-day by the department needs to be analyzed and turned into actionable intelligence to apprehend criminals and reduce crime. The process in place currently is largely informal. In a small community this approach is adequate, but with a deliberate effort to mine data and develop intelligence the WPSD will become more effective. One member of the department should be designated as the intelligence officer and be provided the technology, training, and support to develop criminal intelligence.
25. The ID should develop a “career criminal” monitoring system. There were numerous references made to “small bands” of predatory offenders committing a large amount of crime in the community. The ID should develop a list of these individuals and check them regularly for outstanding warrants, pay regular visits to their places of work or residence, and petition the Solicitor for enhanced prosecution **in the event these individuals are arrested and appear in court on any offense.**

WPSD policies call for supervisory case reviews on a monthly basis, with a report to the director. During this process, progress on individual cases should be reviewed, along with the number and complexity of cases handled by individual investigators, assignment protocols, and the status of cold cases. It does not appear that this process is followed with any regularity and it should be revisited. The ID should also generate a monthly report that contains much of this information, as well as miscellaneous activity, training, notable case updates, and unit statistics.

## Drug Team

The Drug Team in the WPSD is comprised of one corporal and one police officer. The team works Monday through Friday from 8:00 a.m. to 5:00 p.m. and investigates drug offenses as they are reported in the community. The overall activity of the team is impressive. For the first quarter of 2013 (Jan.-Mar.), the two-person team was responsible for 25 arrests, making 20 undercover buys, executing four search warrants, seizing over 30 lbs. of marijuana, closing two methamphetamine labs, and seizing an assortment of other illicit substances. According to the WPSD the team's enforcement philosophy is primarily on street-level activities; the team works with drug enforcement partners in local, state, and federal agencies as cases dictate. With the assignment of two full-time sworn officers the WPSD makes a sizeable investment in drug enforcement and reducing drug use and sales in the community. The activity generated by the team is impressive and the investigators are putting forth an excellent effort combating drugs in Walterboro. The effort, however, needs greater focus and overall management to link it more directly to reducing other serious crime in the community.

The relationship between drugs and crime is complex. From a police perspective, reducing the use and sale of illegal drugs is critical. People using and abusing drugs commit numerous property crimes to support their habits, and the violence associated with the illegal drug trade can cripple a community. Drug enforcement efforts, therefore, must not be isolated at just reducing drug use and sales, but interrelated with reducing overall crime in the community.

The drug team with its already high performing orientation needs to be focused on the violent and property crimes most important to the community. A strategic perspective needs to be developed where the efforts of this team are integrated into an overall crime reduction strategy in Walterboro. This should include a more deliberate use of criminal intelligence and crime analysis (discussed above) and an overarching philosophy that uses drug enforcement and investigation as a tool to reduce other serious crime in the community.

While the drug team needs a greater strategic direction, it also needs greater flexibility with respect to tactical operations and deployment. Requiring the team to work "business" hours and wear distinctive police clothing undermines the effectiveness of the team. The drug team needs to work the hours dictated by the drug intelligence (when and where drugs are used and sold). It is no secret that violent crime in Walterboro occurs at night and on the weekend, and drug use and sales features prominently in this crime. Therefore, the drug team needs to have the flexibility to work nights and weekends within their discretion. The current deployment system requires the team to request a change in hours from their standard "business" schedule. This approach should be abandoned immediately and the drug team should work the hours during which officers will be most effective intervening in the drug trade and disrupting the violent and property crime in Walterboro.

## Community Policing

The WPSD staffs one position entitled Community Officer. This officer works Monday to Friday, 8:00 a.m. to 5:00 p.m., with the flexibility to adjust work hours and days off to meet the needs of the organized community. This is a grant-funded position and funding has been eliminated.

ICMA was in the forefront of promoting the concept of “Community Oriented Policing” starting in 1990. One of the primary concepts of this approach is that Community Oriented Policing is not a program but rather a philosophy that must extend throughout the entire department. Our view is that when community policing activities are assigned to one officer or a specific team, this eliminates (in the view of many police officers) the responsibility for all members of the agency to engage in community policing. Further, ICMA believes that this effort cannot just be a police department responsibility. Effective community outreach requires all city agencies to be fully engaged—what ICMA calls “Community Oriented Governance.”

In 2012 the community officer conducted five school safety seminars, held five guided tours of the police/fire facility for school kids, provided police escorts for six schools trips, attended eleven community meetings with neighborhood churches/clubs/etc., conducted four hunters’ education courses, and held three bank safety meetings with bank employees. In addition, the community officer published a regular column in The Colletonian featuring crime prevention and personal safety advice. The community officer also conducted one residential security survey.

It appears that the community officer position was performing the appropriate types of services relative to this position. To continue and expand these efforts we recommend that each patrol team identify one officer as the “Community Policing Team Lead.” These officers will be responsible for acting as the conduit whereby all members of the team (including station-assigned personnel) have community policing responsibilities. Although the appropriate services are being rendered by the community officer, the scope and breadth of these activities needs to be expanded dramatically, and officers’ activities must be directly linked to the community relations strategy detailed above. In general, the team leads should be tasked with the following duties and responsibilities:

- Implement the community relations strategy on behalf of the director
- Coordinate the Public Safety Community Council
- Maintain frequent and regular contact with the organized community to notify the public about significant events, identify problem areas in the community, and collaborate to solve problems of mutual concern
- Manage the community contacts generated by patrol officers
- Coordinate the crime prevention program to include residential security surveys, personal safety seminars, property protection programs, etc.
- Liaison with the local elementary school administration and parent groups
- Coordinate the Clergy Coalition
- Develop and implement a Citizens’ Police Academy

- Coordinate any special events that occur in the community

Essentially, these officers should act as the “eyes and ears” of the department in the community and vice versa. Based on the public demand voiced at the community meeting held by ICMA in Walterboro, there is a clear need and demand for a more vigorous community relations effort on the part of the WPSD. The Community Policing Team Leads should be the point of contact and the driving force behind this community relations effort and the position with primary responsibility to foster the department-community relationship that is so sorely needed.

## Administration

### Professional Standards

All members of a police department must perform their duties efficiently, professionally, and ethically. The department must have an internal system for the proactive enforcement of performance standards to ensure that these standards are followed at all times.

### Training

Training is currently managed by the Investigations commander. Under the proposed new structure for the department, training this will be part of the Administrative lieutenant's responsibilities, assigned to a PS corporal who will manage both fire and police training. All in-service training is conducted on overtime and training courses are offered off-site and by outside trainers. Little in-service training is conducted by the WPSD, and while there is an expectation that supervisors will provide a shift briefing regularly, there is no formal method of tracking this process or specifying the topics to be covered. First line supervisors do not receive training upon promotion and there appears to be a lack of executive development training as well.

Entry level training is provided by the South Carolina Criminal Justice Academy. The current curriculum is twelve weeks in duration and is offered numerous times each year. Upon completion of this program graduates are certified as a Class I Law Enforcement Officer in the state of South Carolina. The WPSD has two candidates in the current training academy class.

After completion of basic officer training, police officers are required to have 40 hours of training every three years, not including the twice-annual firearms requalification. The WPSD training manager attempts to find courses that satisfy this mandatory requirement; the manager keeps track of the training courses attended by all personnel. The department allocates \$4,250 for training each year. Inspection of the training attendance log maintained by the WPSD reveals a haphazard list of courses attended and a lack of regularity or consistency in the training received by members of the WPSD.

In totality, the posture of the WPSD towards training is inadequate. Much more in terms of resources and effort can be put forth to develop a robust training program for all WPSD employees. The training program also must be integrated into an overall "professional standards" program for the entire department.

### Recommendations:

26. 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 a minimum, the department should periodically review procedures related to the proper handling of emotionally disturbed persons, field investigations (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. The training officer should solicit potential topics from civilian and uniformed members of the department. All lessons

delivered should utilize a standardized lesson plan with distinct learning goals and objectives. All lesson plans and instructional materials should be maintained permanently.

27. The department should make a concerted effort to combine, integrate, and review training lessons whenever possible. Traditional lectures should be supplemented with interactive, tactical role-play scenarios. For example, rather than scheduling and delivering three distinct training sessions on the topics of: 1) the handling of emotionally disturbed persons; 2) vehicle stops; and 3) the use of less than lethal force, one creative and well-designed training session can address all three topics and require officers to review prior lessons and demonstrate acquired skills, while learning new information. In other words, the department should look to tie together training topics that are logically related to one another.
28. The department should provide periodic executive development (i.e., supervisors' training) to its supervisors of every rank. This could be provided either "in-house" or externally (e.g., via a regional police academy or commercial vendors). Potential topics should include review of the proper way to complete performance evaluations of subordinates.
29. The training officer should continue to 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.
30. The department should designate, train, and support one senior member of the department on each patrol team to serve as primary field training officer (FTO). This individual would work with the department's training corporal to review and revise the department's field training program and procedures.
31. All roll call training topics should be recorded and any related training materials should be maintained properly.
32. The recruiting function should be overseen by the professional standards officer.

# Fire Services Analysis

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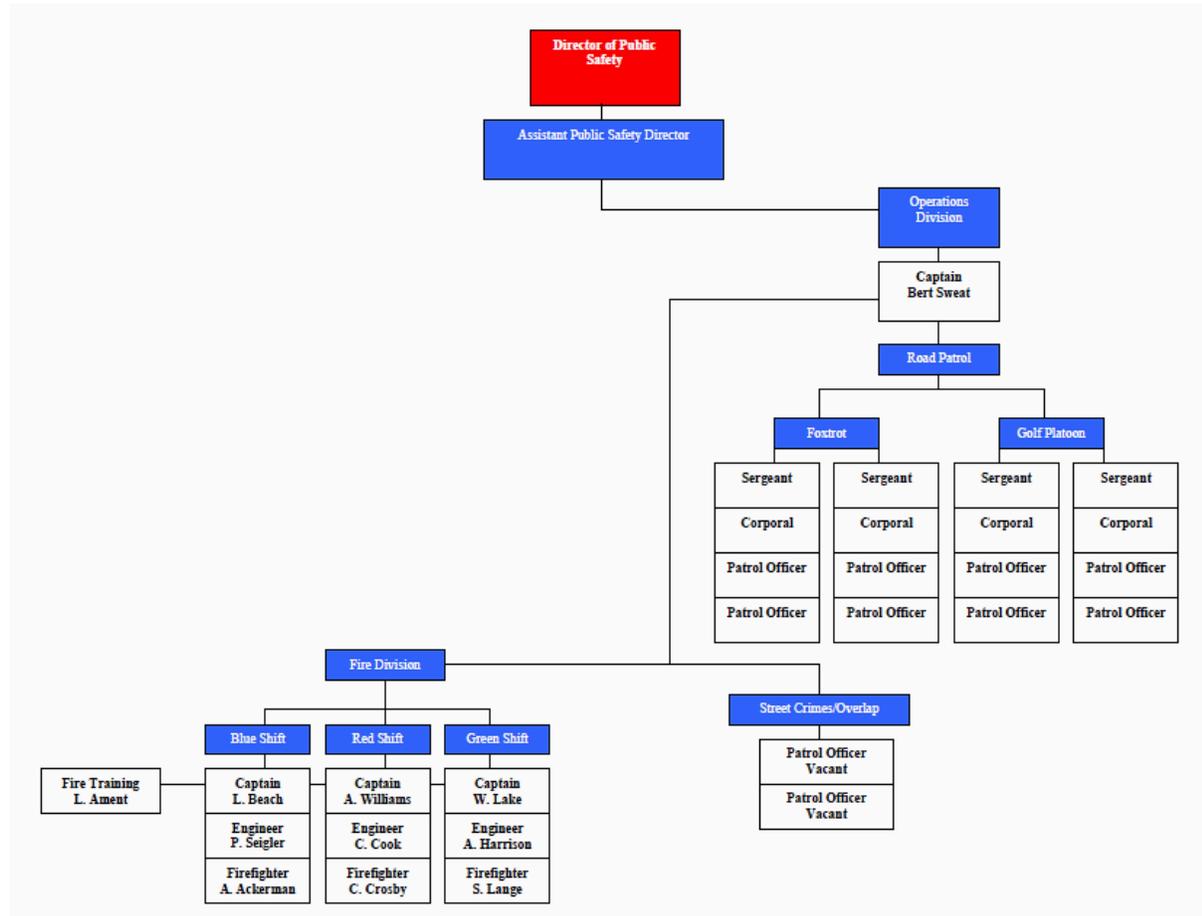
## Operational System

### Staffing and Deployment

The WPSD fire component is comprised of three twenty-four hour shifts, each with three fire staff members assigned. These three staff members are each assigned to one of the three Walterboro fire stations. Aggregately, there are a total of nine field fire suppression positions in the WPSD department. In addition to the field fire suppression positions, there is one full-time firefighter assigned to the training function who works a non-twenty-four hour shift Monday-Friday work schedule.

Each twenty-four hour shift has a fire captain assigned; this position coordinates daily activities and oversees some functional elements of the fire suppression component such as vehicle maintenance, facility oversight, and equipment maintenance, as well as oversight of functional components of fire staff assigned to their shifts. Figure 15 illustrates the organizational structure of fire suppression and its link to the operational segment of the WPSD.

**Figure 15: WPSD-Fire Component Organizational Structure**



The fire suppression component staff members are scheduled from 7:45 a.m. one day to 8:15 a.m. the next day, which equates to 24.5 hours per shift. During each shift crew members schedule three thirty-minute meal breaks (breakfast/lunch/dinner), which is interruptible time should there be a call for service. In addition to this, fire suppression staff is not compensated from the hours midnight to 5:00 a.m., which is considered sleep time. However, should a crew member be alerted for a call during this time period, the crew member receives five hours pay at the straight time hourly pay rate.

There are no extra members available to staff scheduled and unscheduled leave vacancies on a twenty-four hour basis, meaning the WPSD is staffed utilizing a “constant staffing” model. In using this model, all scheduled and unscheduled leave is generally covered utilizing overtime.

To augment fire suppression staffing, WPSD deploys law enforcement patrol officers trained in fire suppression (public safety officers). As discussed earlier and noted in Figure 15, there are four uniform law enforcement officers assigned to each shift. WPSD maintains a minimum staffing of two law enforcement officers per shift; however there is no required minimum staffing of cross-trained (fire/law enforcement) public safety officers. ICMA found that there are times when no

public safety officers are assigned to law enforcement patrol, which impacts fire suppression effectiveness should this capability be needed. Off-duty public safety officers will respond to the scene of a fire if needed and if available.

The WPSD also has volunteer members to supplement fire services. Currently, there are seven volunteer members who participate at varying levels. According to fire staff members, there are on average two to three volunteer members who respond to fire calls. ICMA also learned the WPSD does not actively recruit new volunteer members, and there are not clear retention efforts to sustain current volunteer members.

Recruiting and retaining volunteer fire members into the WPSD fire component will increase capacity of staff and apparatus response to fire incidents, and if directed properly can augment ancillary programs such as fire prevention inspections, community education, and other administrative functions. The National Volunteer Fire Council (NVFC) indicates that the difficulty in recruiting volunteer firefighters is a national concern. They advocate a strategy of a recruiting program that stresses non-firefighting positions as an alternative to structural firefighting.

### Recommendations:

33. A minimum of two fully trained public safety officers should be scheduled during each law enforcement shift to augment fire suppression capabilities.
34. Recruitment and retention of volunteer members for fire suppression should be a priority, and should have a focus on expanding capacity in fire suppression and ancillary program activities. This responsibility should be assigned to the professional standards officer.

### Operational Response and Infrastructure

As discussed above, WPSD staffs three fire stations, each with a single firefighter. WPSD deploys from each station a pumper apparatus, each capable of carrying 1,000 gallons of water to the scene. This apparatus also carries the normal engine company compliment of equipment (1,250 gpm fire pump, hose and appliances, ground ladders, salvage and overhaul equipment, hand tools).

WPSD also deploys a 75-foot quint from station 1 (see Figure 16). This unit is capable of deploying an aerial device, elevated water stream, and has pump-, hose-, and water-carrying capabilities. WPSD staff responds this apparatus only as needed to structural fire calls where the apparatus can be properly positioned and the aerial device utilized. The quint ladder truck is the most recent apparatus in the WPSD inventory, bolstering the Walterboro ISO rating. Walterboro does not automatically dispatch this truck on each fire incident due to staffing levels. However, the department could realize greater potential of this versatile apparatus and improve effectiveness in situations of aerial or ground ladder rescue, or as an engine company to confine and extinguish fires.

Station 1 is headquarters for the WPSD fire component. Accordingly, it is exposed to the most intense and demanding use with all on-duty personnel and supervision assembling here during each shift. Stations 2 and 3 are strategically located based upon the ISO response districts, at the Walterboro Welcome Center (southwest district) and on Robinson Boulevard (northwest district),

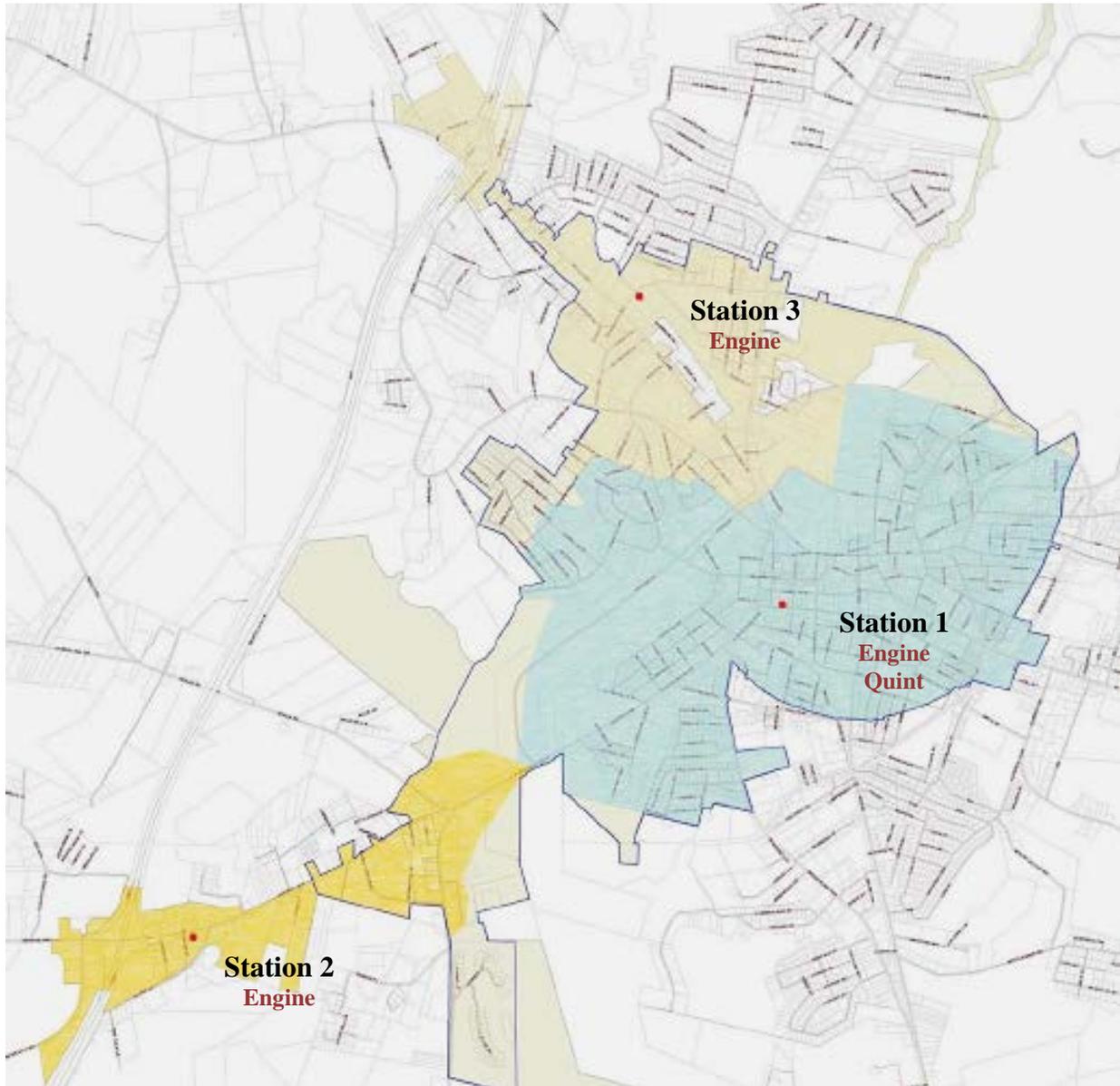
respectively. As these two stations house one responding (engine) apparatus and one firefighter, they experience relatively light staff use.

When a fire call is received from the Walterboro police communications center, each station responds one piece of apparatus to the call for service. The first arriving apparatus on the scene positions accordingly to mitigate the emergency. Incoming fire apparatus positions either to supply water (by tank or hydrant lay/connection) or stages, and apparatus staff is utilized to perform fire suppression activities. Available and arriving cross-trained public safety officers don fire gear and engage fire suppression activities as well. However, as noted there are not always available public safety officers on duty to assist in fire suppression activities. Further, ICMA learned that even when available, not all public safety officers engage fire suppression responsibilities, even though they are trained and receive supplemental wages to do so.

Water supply for municipal fire hydrants is provided by the Walterboro water department. Walterboro has recently upgraded the municipal water system in preparation of an Insurance Services Office evaluation. This included extension of some water lines and looping of others to create a more complete water distribution system in support of fire suppression operations.

Figure 16 illustrates fire districts as well as station locations from which staff and equipment is deployed.

**Figure 16: WPSD Fire Station Locations**



• = Fire Station

The department's heavy fire apparatus inventory consists of three front-line engines (pumpers), one reserve engine, and one quint ladder truck. The newest of the pumpers is over ten years old and the reserve pumper (1984 model) was manufactured before National Fire Protection Association (NFPA) 1901, Standard for Automotive Fire Apparatus, took effect. This document sets minimum standards for mechanical, cosmetic, lighting, and all equipment to be included with fire apparatus to be standards-compliant in the United States.<sup>16</sup> It is not a best practice to have in a fire

<sup>16</sup> NFPA 1901 *Standard for Automotive Fire Apparatus*, 2009 ed.

heavy apparatus fleet any apparatus that was not manufactured to this NFPA standard, or is twenty-five years old.<sup>17</sup> The department faces potential risks in that specifications for safety and mechanical systems had no benchmark standard to be constructed against. For maintenance of this apparatus, the WPSD contracts with Fire-Line Inc.

### Recommendations:

35. Utilize the quint apparatus as an initial response apparatus from station 1 to gain maximum efficiencies and effectiveness on fire suppression responses.
36. Develop and implement a heavy fire apparatus replacement program that includes NFPA 1901 as a benchmark. This plan should also consider the inclusion of quick response vehicles, and what heavy fire apparatus will not have to be replaced as the result changing to a smaller vehicle.

During the twelve-month study period from which study data were derived (March 1, 2012, to February 28, 2013), WPSD responded to 193 fire-related calls as recorded from the fire reporting system and reported to ICMA. From the data provided, 184 calls were included in the data report and analyzed (see the data analysis section for a discussion of issues that ICMA found in Walterboro’s call and response data). Of the 184 responses to calls for service, actual fire calls to which the department responded included 14 structure fire calls and 23 outside fire calls, which together represented 20 percent of all fire-related calls. Table 10 breaks down fire calls for service and workload.

**Table 10: Fire-related Calls and Workload, by Category**

Category	Calls	Runs	Work Hours	Minutes per Run
EMS	21	52	36.7	<b>42.3</b>
MVA	14	37	21.1	<b>34.1</b>
<b>EMS Total</b>	<b>35</b>	<b>89</b>	<b>57.8</b>	<b>38.9</b>
False alarm	65	195	51.4	<b>15.8</b>
Good intent	6	16	4.4	<b>16.3</b>
Hazard	14	42	28.0	<b>40.0</b>
Public service	27	68	32.2	<b>28.4</b>
Outside fire	23	59	24.9	<b>25.3</b>
Structure fire	14	43	53.8	<b>75.0</b>
<b>Fire Total</b>	<b>149</b>	<b>423</b>	<b>194.7</b>	<b>27.6</b>
<b>Fire-EMS Total</b>	<b>184</b>	<b>512</b>	<b>252.4</b>	<b>29.6</b>

A call is a single dispatch of an incident. A dispatch of a unit is defined as a run and thus a call might include multiple runs.

<sup>17</sup> NFPA 1901 *Standard for Automotive Fire Apparatus*, 2009 ed.

Observations from Table 10 include:

- Fire-related activities involved 184 incidents and 512 responding units, or approximately **one call every two days**.
- Total annual workload was 252 hours or **41 minutes per day**.
- Structure and outside fire calls were 20 percent of total fire-related calls and 31 percent of associated workload.

Table 11 looks at individual unit workload. In this table each primary response unit is analyzed. The totals represent a one-year period. ***Aggregately, the fire suppression component workload is relatively low.***

**Table 11: Fire-related Workload, by Unit**

Unit	Runs	Minutes per Run	Hours
Engine 1	170	29.2	82.7
Engine 2	156	29.0	75.4
Ladder truck	30	34.0	17.0
Engine 3	156	29.8	77.4

Observations from Table 11 include:

- Engine 1 responded to the most calls during the year with 170 runs; it had an annual workload of 82.7 hours.
- The department's ladder truck responded to the fewest calls during the year with 30 runs; it had an annual workload of 17.0 hours.

Response time, call demand, and distribution of fire stations are important planning elements in fire protection. According to NFPA 1710, Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Departments, 2010 Edition, travel time shall be less than or equal to 240 seconds for the first arriving engine company 90 percent of the time. The standard further states the initial first alarm assignment should be assembled on scene in 480 seconds 90 percent of the time. Staffing of companies is further defined in the standard. ICMA was not able to analyze response time data for this report due to recordkeeping issues by the Walterboro emergency communications center. NFPA 1710 response time criterion is a benchmark for service delivery and not an ICMA recommendation.

Distribution of fire stations is more complex as fire service organizations seek to meet both NFPA 1710 and the Insurance Services Organization (ISO) Public Protection Classification (PPC) evaluation criterion. The NFPA benchmark is noted above for the initial arriving company and for additional first alarm companies. In the case of WPSD, on-scene staffing is collected from responding fire apparatus (one person each) and available public safety officers. The ISO-PPC

criterion establishes "standard response districts" around each existing fire station. The standard response district for an engine company is a polygon defined by streets leading from the fire station out to a distance of 1.5 road miles. For a ladder-service company, the standard response district is a polygon defined by streets out to a distance of 2.5 road miles.<sup>18</sup> Figure 17 identifies each response district for Walterboro. Meeting the ISO-PPC station distribution criterion for fire service delivery is not an ICMA recommendation.

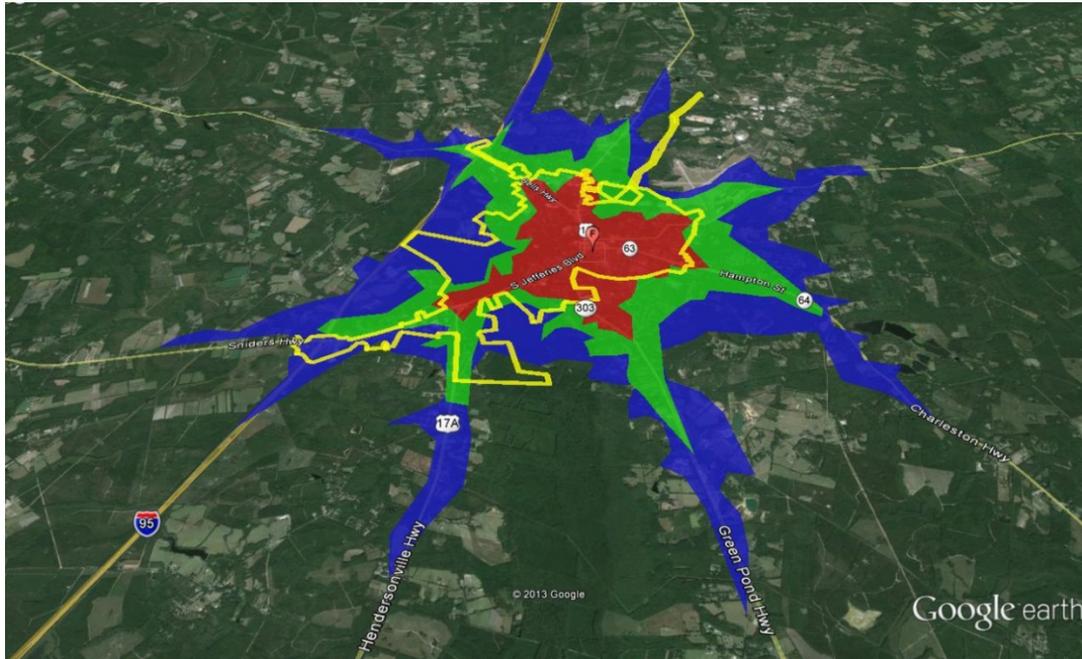
Figures 17, 18, and 197 illustrate response time travel bleeds from each fire station. Figure 20 is an aggregate overlay of all three stations.

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<sup>18</sup> <http://www.isomitigation.com/ppc/3000/ppc3014.html>

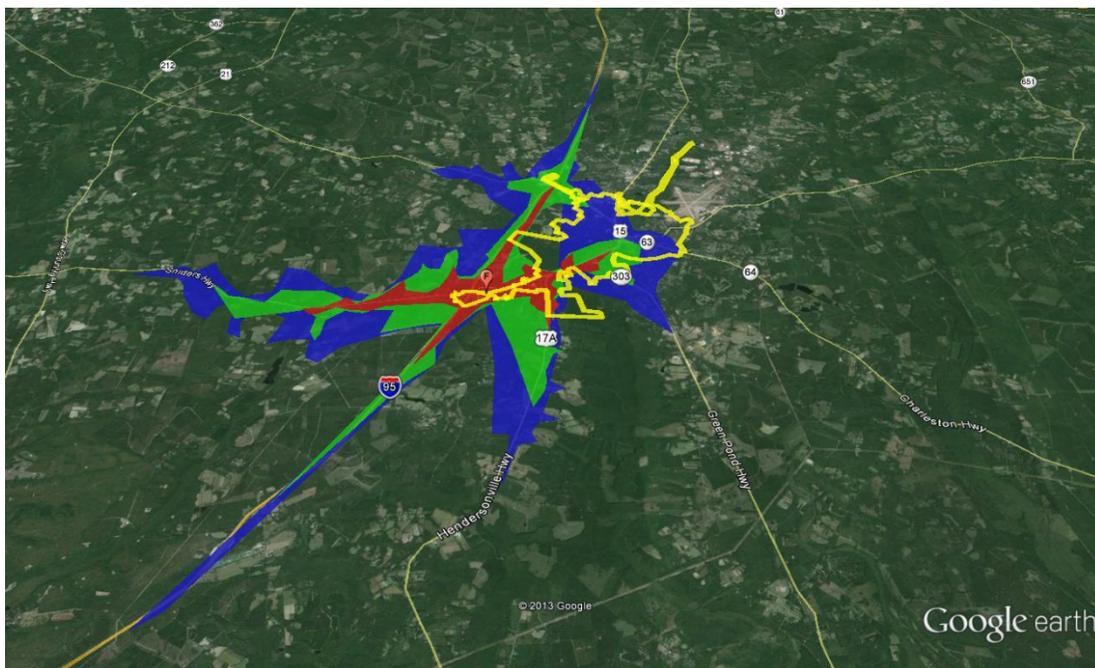
### Figure 17: Station 1 Travel Time Bleeds

red=240 seconds, green = 360 seconds, blue = 480 seconds.



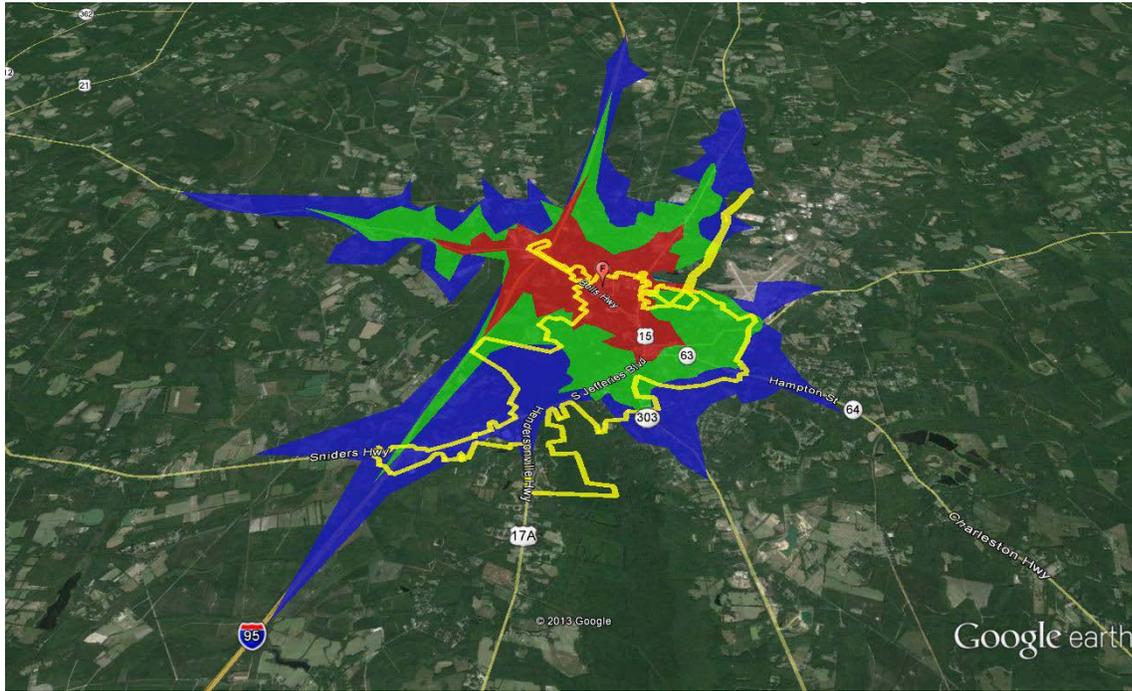
### Figure 18: Station 2 Travel Time Bleeds

red=240 seconds, green = 360 seconds, blue = 480 seconds.



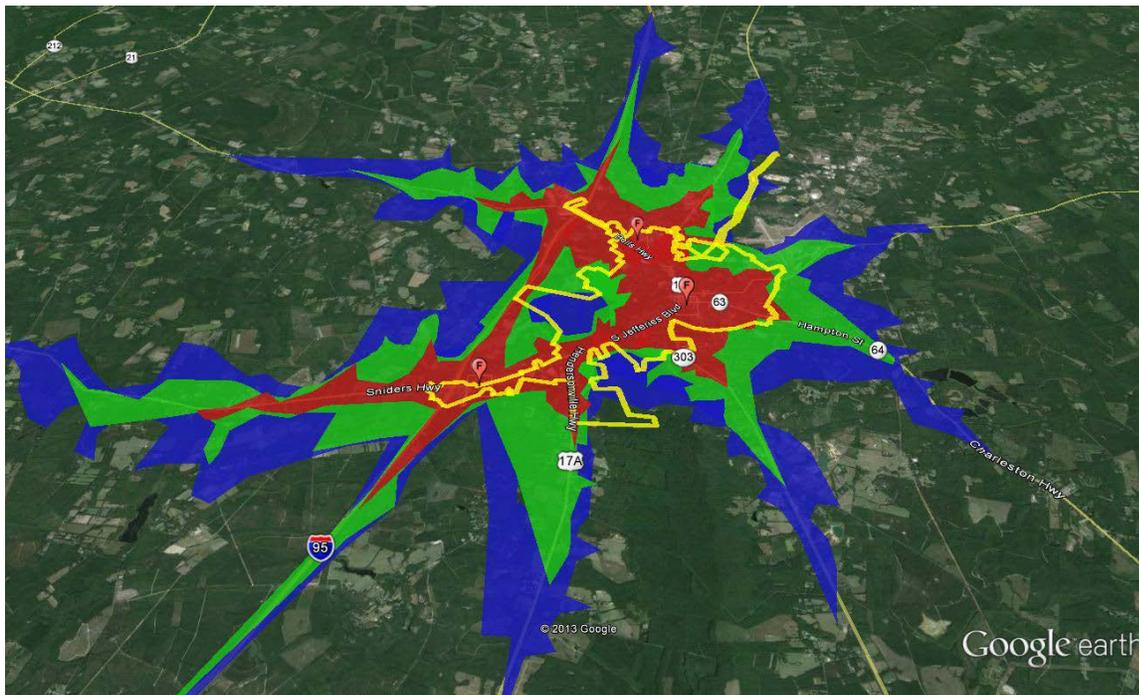
### Figure 19: Station 3 Travel Time Bleeds

red=240 seconds, green = 360 seconds, blue = 480 seconds.



### Figure 20: Aggregate Travel Time Bleeds

red=240 seconds, green = 360 seconds, blue = 480 seconds







## Recommendations:

37. ICMA strongly recommends that the WPSD implement a program to cross-train in fire suppression all uniform members of the law enforcement. ICMA further recommends that all fire staff members be encouraged to cross-train in law enforcement to be utilized as available capacity to back-fill law enforcement shift vacancies, and to be available as surge capacity in law enforcement as needed.
38. ICMA strongly recommends the department consider the deployment of nontraditional quick response vehicles in fire station 2 and 3 response areas that will serve both law enforcement and fire suppression capabilities.
39. ICMA strongly recommends that the department take steps to ensure that all cross-trained public safety officers fully accept the responsibility of the fire suppression component, and be held accountable for this position requirement.
40. ICMA further recommends that minimum staffing for police road patrol be three officers plus one supervisor (sergeant or corporal), and that minimum staffing for fire suppression be two and located at station 1.

## Risk Assessment and Risk Management Planning

A public safety/fire department should conduct a community risk analysis within its community for use in the comprehensive planning process. This assessment process will assist in determining the resources and assets needed to accomplish the department's core mission functions. Deciding how many emergency response resources to deploy is not always an exact science. There are many factors that affect the final decisions on where and when to expand or contract these services. *The final decision on a deployment model is based on a combination of risk analysis, the demand for services, capacity within the current service delivery model, professional judgment, and the governing body's willingness to accept more or less public-safety risk, based on available revenues.*

Community risk and vulnerability assessments are essential elements in a fire department's planning process. According to a National Fire Protection Association (NFPA) paper on assessing community vulnerability, *fire department operational performance is a function of three considerations: resource availability/reliability, department capability, and operational effectiveness.*<sup>19</sup> These elements can be further defined as:

**Resource availability/reliability:** The degree to which the resources are ready and available to respond.

**Department capability:** The ability of the resources deployed to manage an incident.

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<sup>19</sup> Fire Service Deployment, Assessing Community Vulnerability: From <http://www.nfpa.org/assets/files/pdf/urbanfirevulnerability.pdf>.

**Operational effectiveness:** The product of availability and capability. It is the outcome achieved by the deployed resources or a measure of the ability to match resources deployed to the risk level to which they are responding.<sup>20</sup>

The community risk and vulnerability assessment evaluates the community as a whole, and with regard to property, measures all property and the risk associated with that property and then segregates the property as either a high-, medium-, or low-hazard. According to the NFPA *Fire Protection Handbook*, these hazards are defined as:

**High-hazard occupancies:** Schools, hospitals, nursing homes, explosives plants, refineries, high-rise buildings, and other high life-hazard or large fire-potential occupancies.

**Medium-hazard occupancies:** Apartments, offices, and mercantile and industrial occupancies not normally requiring extensive rescue by firefighting forces.

**Low-hazard occupancies:** One-, two-, or three-family dwellings and scattered small business and industrial occupancies.<sup>21</sup>

Linking a fire department's operational performance functionality to the community risk and vulnerability assessment further assists fire personnel in the planning process by increasing their understanding of the community risk with regard to property and life-hazard potential. By plotting the rated properties on a map, planners can better understand how current and future resource capabilities relate to specific risks and vulnerabilities, and then can identify potential gaps in service delivery. The community risk assessment may also include determining and defining the differences in risk between a detached single-family dwelling, a multifamily dwelling, an industrial building, and a high-rise building by placing each in a separate category.

The WPSD has not conducted a community risk reduction plan/program. With respect to recent annexation, consideration should be given to conducting a comprehensive community risk reduction program and adopting new standards to support future sustainable growth and public safety protective services.

The Walterboro ICMA site visit included the ICMA staff attending a Town Hall Forum on Public Safety. The objective of this forum was to hear comments, concerns, and suggestions regarding public safety in the city. During this meeting clergy representatives and community organization leaders expressed great interest and a willingness to assist in the stabilization of public safety.

Based upon the limited resources of the WPSD, and the need to establish a strong community risk reduction program, the city and the department may consider reaching out to the clergy and community leaders who were in attendance and those unable to attend, with a collaborative opportunity to serve as "Champions" for fire prevention and community risk reduction.

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<sup>20</sup> National Fire Service Data Summit Proceedings, U.S. Department of Commerce, NIST Tech Note 1698, May 2011.

<sup>21</sup> Cote, Grant, Hall & Solomon, eds., *Fire Protection Handbook* (Quincy, MA: National Fire Protection Association, 2008), 12.

## Recommendations:

41. Conduct a community risk assessment and continually analyze/utilize the results in the planning of future staffing and deployment of fire services and apparatus needs.
42. Develop and implement a program utilizing citizens from the community (Champions) to assist in managing community risk. One alternative to implement this process is to divide the city into three geographical divisions based upon the locations of the three current fire districts. Each district would concentrate on operations, prevention, training, and most importantly, community groups. A designated fire staff member would be a community group or team leader. Groups/ teams would meet quarterly at each station to review that station's call patterns and risk factors. When residents of Walterboro and decision makers understand existing and potential risks, they are better prepared to partner with all emergency services to address challenges and conceivably accomplish the following:
  - Help to create and support risk reduction initiatives
  - Leads the process of identifying and prioritizing community risk at each fire district level
  - Supports those who are involved actively in the on-going risk reduction process
  - Works strategically to mitigate targeted risks and helps to promote public policies that support community risk reduction.

## Supportive Programs/Functions

### Fire Prevention/Investigation/Public Education

#### *Fire Prevention*

A cross-trained public safety officer assigned to the WPSD fire component (primary role is fire suppression) serves as the fire inspector, assuming primary responsibility for fire prevention within the city of Walterboro. The chief/director of the WPSD, through South Carolina Code 23-9-30, acts as the ex-officio fire marshal for the city. The fire inspector, acting under the auspices of the chief/director conducts commercial business occupancy and new construction inspections, routine fire inspections and re-inspections, and fire inspections linked to special events. In addition, the fire inspector signs off on all business license applications.

The city of Walterboro has adopted the 2003 International Fire Code (City of Walterboro Ordinance # 2008-05), a best practice. When asked by ICMA what fire code the city currently adopted and is responsible by ordinance to enforce, the fire inspector was unsure. The fire captain, who provides oversight to the shift the fire inspector is assigned to, and to the fire prevention program, was also not sure. The fire inspector did subsequently provide ICMA with information about the fire code. It is a best practice to have a full understanding of what fire code is applicable, and how the code is both interpreted and enforced. The city of Walterboro building official reviews and signs off on all building-related applications before issuance, and is also responsible for enforcement of the building code as adopted by city council and legislated through the city code of ordinances.

The fire inspector conducts approximately 500 commercial fire inspections annually. ICMA learned that there is no specific schedule to conduct fire inspections, or a fire prevention plan that includes, for example, the inspection of high hazards, places of public assembly, and institutional occupancies on a regularly scheduled (in some cases annually) basis. During the ICMA site visit, a field analysis of past fire inspection reports was undertaken. This review disclosed that almost all of the fire inspection order notices had been issued technically incomplete. While the observed code violation and corrections needed were listed, the corresponding specific fire code violation was omitted from the notice, a practice that potentially may create liability for the city.

ICMA further discovered the fire inspector does not carry the fire code book with him on fire inspections; the code book will have the specific code violation listed by subject matter and hazard. It is a best practice to establish a fire inspection plan and schedule of inspections. It is also a best practice to conduct fire inspections with the fire code book to ensure a violation is interpreted and posted to the fire inspection report correctly, and the proper corrective action is also noted in the report.

The WPSD website indicates that the fire inspector is certified through the state of South Carolina Fire Marshals' Office as a Resident State Fire Marshal. However, during the ICMA on-site visit it was determined that the fire inspector is not state certified, but is scheduled to enroll in the state certification class in the summer of 2013. This situation potentially creates liability and should be rectified immediately.

## Recommendations:

43. The South Carolina Department of Labor, Licensing and Regulations, Office of the State Fire Marshal, certifies Local Resident Fire Marshals/Inspectors. It is recommended that the current Inspector be enrolled in this program.
44. Establish a comprehensive annual inspection database and inspection plan based upon risk-hazard-analysis and state mandates. This planning should include inspections performed by the fire inspector and any fire safety inspections performed by fire suppression personnel.
45. All fire marshal inspection orders (Notice of Order) should include the best practice of posting the appropriate code violation that mandates correction for each violation.
46. The WPSD should evaluate and choose a software package and field instruments to perform all inspections (fire, building, zoning etc.). This investment will significantly reduce inspection time and increase productivity and efficiency, provide data for instant reports, and track violations and corrective actions as well as inspections/re-inspections and due dates.
47. Establish a succession program to begin the training process for the next generation of Inspectors. This will ensure that the important institutional knowledge will be preserved.

### *Fire Investigation*

The WPSD utilizes the state of South Carolina Law Enforcement Division (SLED) to conduct fire investigations and fire cause and origin. During the ICMA site visit it was determined that no data collection instrument has been established to capture incident information regarding cause and origin, arson investigation, and incident scene preservation and turnover to SLED. With an outside agency conducting fire cause and origin, it is important that this information be retained and recorded by the WPSD for department analysis.

A review of WPSD department operational guidelines pertaining to scene contamination and evidence preservation is warranted as well. Department policy 95-021, implemented in 1995, should be updated to include fire origin and cause and arson investigation, with a specific focus on chain of custody and scene preservation.

## Recommendations:

48. Establish a database to record incident information regarding cause and origin, arson investigation, incident scene preservation, and SLED investigation results.
49. Update department policy 95-021 or develop a new policy that includes SLED notification for suspicious fires, and for fire origin and cause and arson investigation, with a specific focus on chain of custody and scene preservation.

## External System Relationships

Local governments use many types of intergovernmental agreements to enhance local fire protection and EMS services. It is important that fire departments be able to quickly access extra and/or specialized resources in the aftermath of a disaster or other large-scale event. In addition, because these types of incidents do not respect jurisdictional boundaries, they often require coordinated response. Sharing specialized capabilities, such as hazmat response units, also helps departments reduce costs without impacting service delivery. All of these situations point to the need for good working relationships with other fire and EMS organizations.

According to the WPSD command staff, the WPSD currently does not have a written mutual aid agreement with Colleton County. As noted in this report, Colleton County provides PSAP services to the WPSD dispatch center. In addition and as a part of the countywide EMS service delivery system, Colleton County Fire-Rescue provides EMS service, to include EMS transport, to the city of Walterboro. WPSD does not respond to routine EMS calls as fire first responders, although WPSD fire apparatus does respond to automobile accidents to control potential hazards associated with these incidents.

In the last 120 days, Colleton County has notified the city that, due to issues with WPSD fire response, incident command procedures, and general fireground practices, Colleton County Fire-Rescue would modify its automatic response to structural fire incidents requiring an increased level of response assets to a pure mutual aid response where a specific request will have to be made by WPSD command staff for these assets from the county. County-provided EMS service delivery will remain as is, as will county response to hazardous materials and vehicle extrication incidents, although a fee for these services (hazardous materials response and vehicle extrication) would be established. It remains important, particularly based on the staffing levels and response capabilities of WPSD, which the city and county continue to work through service delivery issues and establish a formal agreement for the provision of mutual aid.

### Recommendation:

50. The city of Walterboro should work with Colleton County to develop and implement a mutual aid agreement with Colleton County Fire-Rescue. The purpose of this agreement is to expand fire and technical rescue/asset response capabilities in the aftermath of a disaster or during large-scale events, and where applicable, assist with day-to-day responses in areas of extended response times for initial and additional responding Walterboro units.

## Training and Education

WPSD fire training certifications are administered through the state of South Carolina Department of Labor, Licensing and Regulation. WPSD centric administrative and operational training is administered by the agency, through a training officer who provides oversight and works a nonshift regular work schedule. WPSD training is delivered through several modes to include self-study, hands-on practical, station-based with fire crews assembled, and independent computer-based training. ICMA found that the focus of the fire training was the ISO compliant training (in terms of subject matter and number of hours). While this focus is perhaps a necessary requisite for

Walterboro's' recent improved ISO rating, it should serve as the primary foundation of the WPSD fire training curriculum, yet be enhanced through other subject matter designed to expand staff knowledge base and increase skill level.

In our review of training records, it was determined that the WPSD maintains records of each staff member's training certifications and as well an on-going record of annual training completed. An annual training schedule is posted; it covers an eleven-month period (January-November). To record the training, a monthly training sheet is sent to each fire staff member and public safety officer trained in fire suppression. It is the employee's responsibility to participate in the training, sign the sheet acknowledging same, and return the signed sheet to the WPSD fire training officer. Although the ICMA site visit revealed ongoing training, with a training documentation manual capturing each employee's training records, it appears there are no sustainable measures of evaluation, verification, or supervisory accountability. As training records are captured manually, there is no computer-based training documentation that indicates training hours by subject matter, only that training is completed.

During the ICMA site visit, the ICMA staff was able to observe the training tower and training grounds. ICMA found this site to be adequate to meet the current training demands; it offers future expansion opportunities if needed. The training site is also utilized at times to temporarily store police cruisers. According to fire staff this has diminished the full use of the training building on some occasions.

Quality assurance/improvement is a consideration in all aspects of operational service delivery and training, and also in the constant evaluation of the physical and mental preparedness of public safety staff. To have able and ready firefighters, there is a need for training to promote growth in firefighting skills; skills maintenance for all members; practice to ensure efficient, effective delivery; and evaluation to validate that all members are prepared at all times.

Because calls for assistance can occur at any time and can be of any nature, all members must be capable of performing their assigned duties. Even with fewer actual fires, members must still maintain their skill levels despite the fact that the department may be unable to monitor their skill level on a daily basis.

One method to maintain a motivated staff to do the best possible job and prepare themselves is to monitor skill maintenance through annual skill competency evaluations. With this program, fire suppression members perform various skills under controlled conditions on an annual basis. These skills can be as simple as an evaluation of individual Firefighter I skills to the deployment of hand lines and ground ladders under simulated fireground conditions as a team. In either case, performance evaluation sheets are completed on each member, reviewed by command staff, and additional training is designed each year utilizing this program as the foundation.

## Recommendations:

51. Continue expansion of the fire training regimen beyond ISO requirements to include South Carolina fire academy on-line training courses, regular use of the training tower and training grounds to maximize practical skills training, and concentration on team skills and initial fireground operations with minimum staffing.

52. Develop and implement a training record system that is maintained in a database. This system should include certification training as well as WPSD-centric administrative and operational training.
53. Implement quality assurance/improvement measures regarding practical skills through the development and implementation of annual skill competency evaluations.

## Emergency Communications

Emergency communications for WPSD are handled in part by the WPSD dispatch office, which is under the command of the assistant director (see Figure 2). This office receives e-911 phone calls from the Colleton County emergency communications center, which serves as the primary public safety answering point (PSAP) for the city of Walterboro as well as Colleton County.

Staffing for the WPSD dispatch center is two dispatchers per day. This staffing is not continuous with two dispatchers on duty twenty-four hours a day, but rather two on duty between the hours of 7:00 a.m. and 3:00 p.m. These hours have been determined to have the greatest demand for two dispatchers. Dispatchers in the WPSD dispatch office are required to monitor the radio and phones during active/working calls, which potentially create a situation where one or the other of these tasks may not be managed effectively.

The WPSD dispatch center does not have a computer-aided dispatch (CAD) system. Public safety CAD systems utilize computer software to perform such dispatch functions as initiating public safety calls for service, dispatching appropriate units based on run cards or patrol zones, and maintaining the status of responding resources in the field. The WPSD dispatchers record all data manually utilizing different logs and forms for fire and police. As discussed in the accompanying data analysis section of this report recording dispatch information manually has created a plethora of data analysis and management issues for the WPSD. These issues include:

- The data originates from a handwritten log file that is later recorded in three different formats. The quality of the original format is limited. In addition, the process of converting the handwritten log into digital format involves clear data entry errors that did not appear to be subject to any quality review.
- Traffic stops are not recorded routinely via electronic means, although they will be captured in situations that lead to other patrol activities, such as a DUI arrest. Administrative time is not tracked.
- Timestamps are only captured to the nearest minute in all data sources. Standard computer-aided dispatch systems record activities to the second. ICMA observed a battery-operated desk clock, which the on-duty dispatcher advised was the official recording clock for the WPSD dispatch center.
- Individual responding units are not tracked.
- There is no reliable call received time that can be distinguished from a subsequent dispatch time, creating a situation where there is no way to measure dispatch processing times, a critical measure in both fire and police response times.

- The lack of independent en-route times for fire calls makes it impossible to separate response time components into turnout and travel times.
- Priorities of calls are not recorded, so there is no segregation of the response times for regular and high-priority calls.
- The arrival time information is not recorded in noncriminal records and was found to be incorrect for some criminal records.

The Colleton County emergency communications center utilizes a state-of-the-art CAD system (SunGard CAD). Staffing for the Colleton County center is two call taker/dispatchers and one supervisor twenty-four hours a day. The Colleton County emergency communications center currently dispatches the Colleton County Sheriff's office, Colleton County Fire-Rescue, Cottageville police department, and the Edisto Beach police department. Additionally the Colleton County center dispatchers are trained and certified in priority emergency medical dispatch. According to ASTM's Standard Practice for Emergency Medical Dispatch Management:

"The emergency medical dispatcher (EMD) is the principle link between the public caller requesting emergency medical assistance and the emergency medical service (EMS) resource delivery system. As such, the EMD plays a fundamental role in the ability of the EMS system to respond to a perceived medical emergency. With proper training, program administration, supervision, and medical direction, the EMD can accurately query the caller, select an appropriate method of response, provide pertinent information to responders and give appropriate aid and direction for patients through the caller. Through careful application and reference to a written, medically approved, emergency medical dispatch protocol, sound decisions concerning EMS responses can be made in a safe, reproducible, and non-arbitrary manner. These benefits are realized by EMS systems when appropriate implementation, sound medical management and quality assurance/quality improvement (QA/QI) at dispatch are provided within the EMD/EMS system. This practice assists in establishing these management and administrative standards."<sup>22</sup>

The Colleton County emergency communications center is equipped at a higher technology level, and staffed at a higher level both in personnel and training to handle emergency communication functions than is the WPSD. As discussed, the Colleton center already serves as the PSAP for WPSD.

### Recommendation:

54. ICMA strongly recommends that the city of Walterboro contract with Colleton County for emergency communications services.

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<sup>22</sup> ASTM Standard F1258, 2006, "Standard Practice for Emergency Medical Dispatch," ASTM International, West Conshohocken, PA, 2003. [www.astm.org](http://www.astm.org).

## Data Analysis

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This is the data analysis report on public safety patrol and response for the city of Walterboro. This analysis, conducted by the ICMA Center for Public Safety Management, focuses on three main areas: workload, deployment, and response times. These three areas are related almost exclusively to patrol operations, which constitute a significant portion of the public safety department's personnel and financial commitment.

All information in this report was developed directly from the data collected by the Colleton County Sheriff's Communications Center.

The majority of the first section of the report, concluding with Table D8, uses call and activity data for a year, from March 1, 2012, to February 28, 2013. For the detailed workload analysis and the response-time analysis, we use two eight-week sample periods. The first period is July and August 2012 (July 6 to August 30), or summer, and the second period is January and February 2013 (January 4 to February 28), or winter.

## Workload Analysis

When we analyze a set of dispatch records, we go through a series of steps:

1. 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 incomplete data. This includes situations where there is not enough time information to evaluate the record.
2. 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."
3. Then, we remove all records that do not involve a patrol unit to get a total number of patrol-related **events**.
4. At important points during our analysis, we focus on a smaller group of events designed to represent actual **calls** for service. This excludes events with no officer time spent on scene and directed patrol activities.

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

While analyzing Walterboro data, we came across some significant issues. A primary problem with the city's data is that it originates from a handwritten log file that is later recorded in three different formats. The quality of the original format is limited. In addition, the process of converting the handwritten log into digital format involves clear data-entry errors that did not appear to be subject to any quality review. Traffic stops are not recorded routinely via electronic means, although they will be captured in situations that lead to other patrol activities, such as a DUI arrest. Administrative time is not tracked.

We used three data sources: criminal records, noncriminal records, and National Fire Incident Reporting System (NFIRS) data extracted from FireHouse. There were some problems common to all the data sources and some that were specific to a particular data source.

- Timestamps are only captured to the nearest minute in all data sources. Standard computer-aided dispatch systems record activities to the second.
- There is no ready method to identify self-initiated calls. At best, we could assume that all directed-patrol activities were self-initiated.
- Individual responding units are not tracked. We estimated the number of units responding by isolating the names of officers assigned to the call.

- As there is no reliable call received time that can be distinguished from a subsequent dispatch time, there is no way to measure dispatch processing times.
- The lack of independent en-route times for fire calls makes it impossible to separate response time components into turnout and travel times.
- Priorities of calls are not recorded, so we could not segregate the response times for regular and high-priority calls.
- The call received and clear times for 18 percent of the calls were the same, thus resulting in a large number of calls with zero time on scene (1,583 calls). We assumed that these calls were recorded inaccurately. We estimated the occupied time for each call based upon its general category. The average occupied time for each category is shown in Table D6. We included these calls by assigning an average busy time to these calls based on the category of the calls. We have separated these calls when drawing the workload graphs.
- The arrival time information was missing in all noncriminal records and was incorrect for some criminal records. Overall, we could use only 10 percent of the total records or 872 calls of a total of 8,404 calls for response time calculations; 90 percent of fire calls were included.
- The department used approximately 410 different event descriptions in its records, which we reduced to fourteen categories for our tables and nine categories for our figures (shown on the following page). Some criminal records had multiple descriptions corresponding to separate offenses. These events were classified based on the primary offense and in collaboration with the public safety department. All NFIRS entries were categorized using standard incident types.

In the period from March 1, 2012 to February 28, 2013, there were 8,623 events recorded by the communications center. Of those events, approximately 193 calls were from the NFIRS system, 2,063 from the criminal records, and 6,367 from the noncriminal records. Of that total, about 8,404 calls included an adequate record of a patrol unit as either the primary or secondary unit. This included 190 calls from NFIRS, 1,989 from criminal records, and 6,225 from noncriminal records.

In the period from March 1, 2012 to February 28, 2013, the public safety department reported an average of 23 events per day. Due to data entry problems, we could not accurately distinguish genuine zero time on scene calls or canceled calls from calls containing data entry errors. For calls where the call received time was the same as the clear time, we approximated the workload based upon other calls in the same category. For those few calls with recorded arrival times, if the call received, arrival, and dispatch times were identical they remained classified as zero time on scene calls. Figures D1 and D1A give the approximate percentages of calls with zero time on scene before and after we estimated their workload. In later tables, calls are occasionally separated as “estimated calls” and “measured calls.”

In the following pages we show two types of data: activity and workload. The activity levels are measured by the average number of calls per day, broken down by the type and origin of the calls and categorized by the nature of the calls (crime, traffic, etc.). Workloads are measured in average work-hours per day.

We routinely used fourteen call categories for tables and nine categories for graphs, as shown in the chart. Categories with very few total calls (< 5) were not separated out.

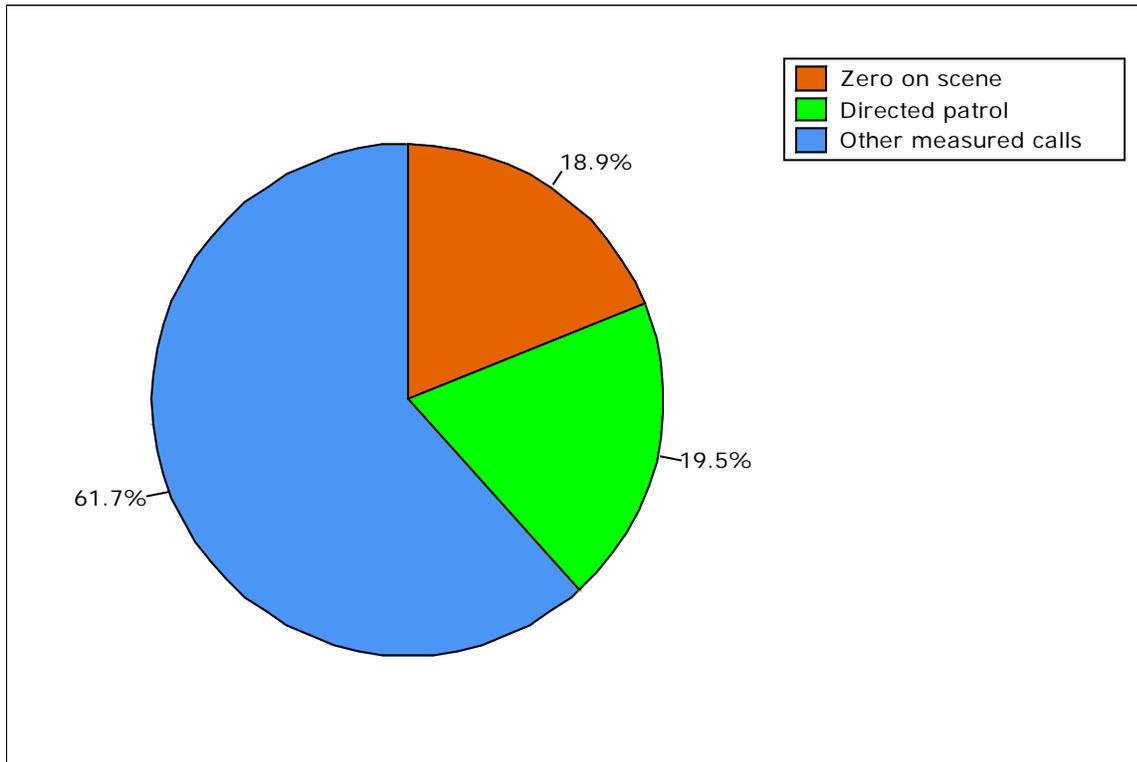
**Chart 1: Call Categories List**

Table Categories	Figure Categories
Prisoner–arrest	Arrest
Assist other agency	Assist other agency
Crime–persons	Crime
Crime–property	
Directed patrol	Directed patrol
Disturbance	Disturbance
EMS	Fire related
Fire	
Animal calls	General noncriminal
Miscellaneous	
Alarms	Investigations
Check/investigation	
Accidents	Traffic
Traffic enforcement	

**Note:** All calls recorded in the NFIRS system were recorded as fire-related calls. Within the fire-related calls, we grouped together the following incident types into fire calls and EMS calls.

NFIRS Call Type	Table Categories
EMS	EMS
Motor vehicle accident (MVA)	
Structure fire	Fire
Outside fire	
Hazard	
False alarm	
Good intent	
Public service	

**Figure D1: Percentage Events per Day**



**Note:** Percentages are based on a total of 8,404 events.

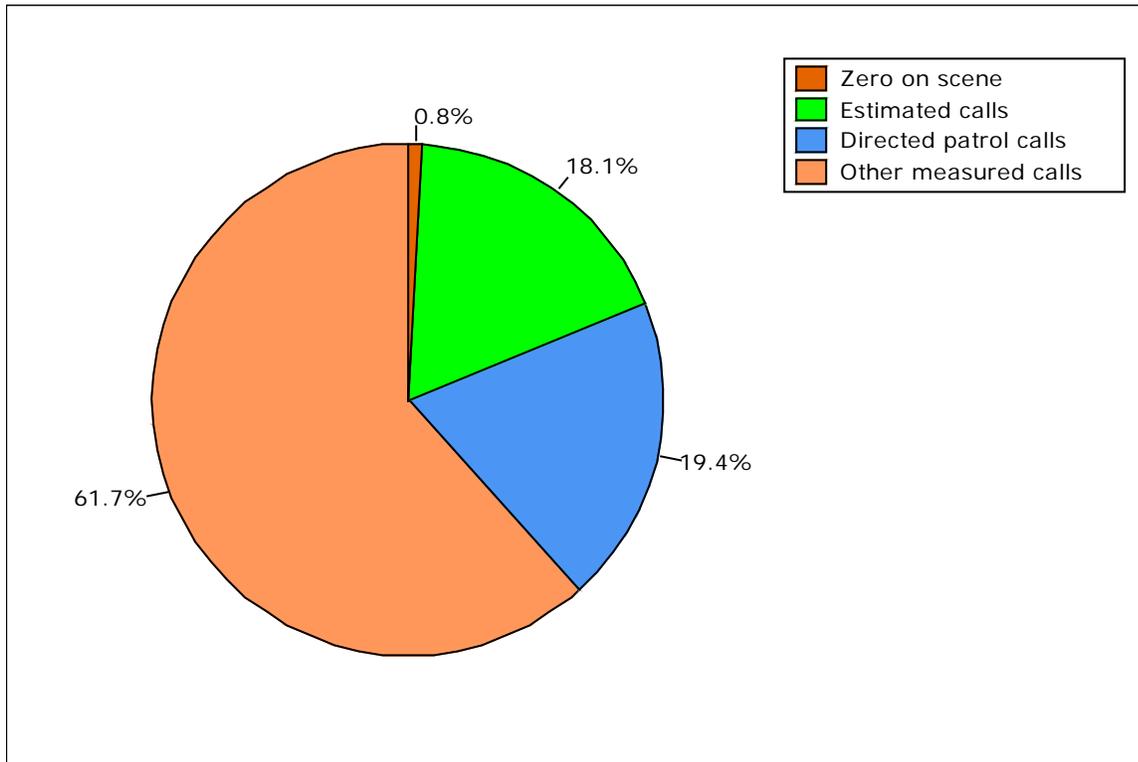
**Table D1: Events per Day**

Event type	Total Events	Events per Day
Zero on scene	1,587	4.4
Directed patrol	1,635	4.5
Other measured calls	5,182	14.2
<b>Total</b>	<b>8,404</b>	<b>23.0</b>

**Observations:**

- 19 percent of the events had zero time on scene.
- 19 percent of all events were directed-patrol events.
- 62 percent of all events were other (accurately) measured calls, including other-initiated as well as self-initiated calls.
- There was an average of 23 events per day, or approximately one per hour.

**Figure D1A: Percentage Events per Day (Modified)**



**Note:** Percentages are based on a total of 8,404 events. There were 270 directed patrol calls that had an estimated busy time and that are included within the estimated calls.

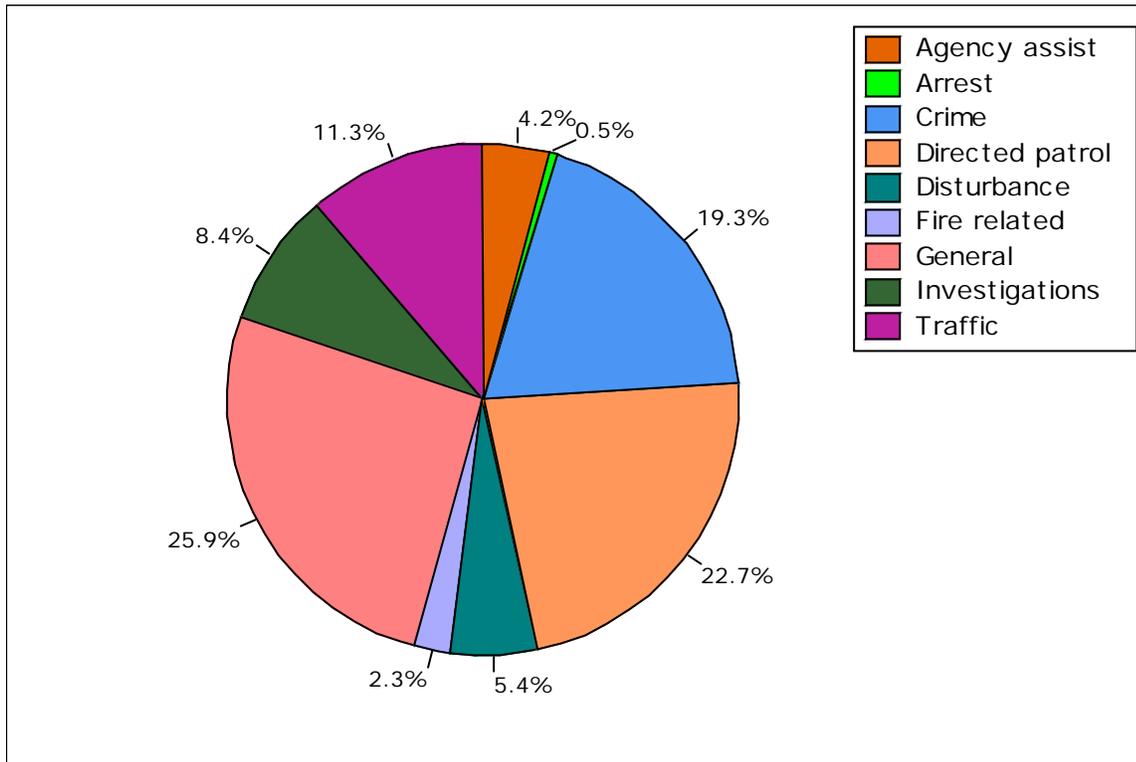
**Table D1A: Events per Day (Modified)**

Event type	Total Events	Events per Day
Zero on scene	69	0.2
Estimated calls	1,519	4.2
Directed patrol	1,634	4.5
Other measured calls	5,182	14.2
<b>Total</b>	<b>8,404</b>	<b>23.0</b>

**Observations:**

- Approximately 1 percent of events had zero time on scene.
- 18 percent of all events had times wherein the start and end times were the same and therefore have an estimated workload based on busy times for the call category (see Table D6).

**Figure D2: Percentage Events per Day, by Category**



**Note:** The figure combines categories in the following table according to the description in Chart 1.

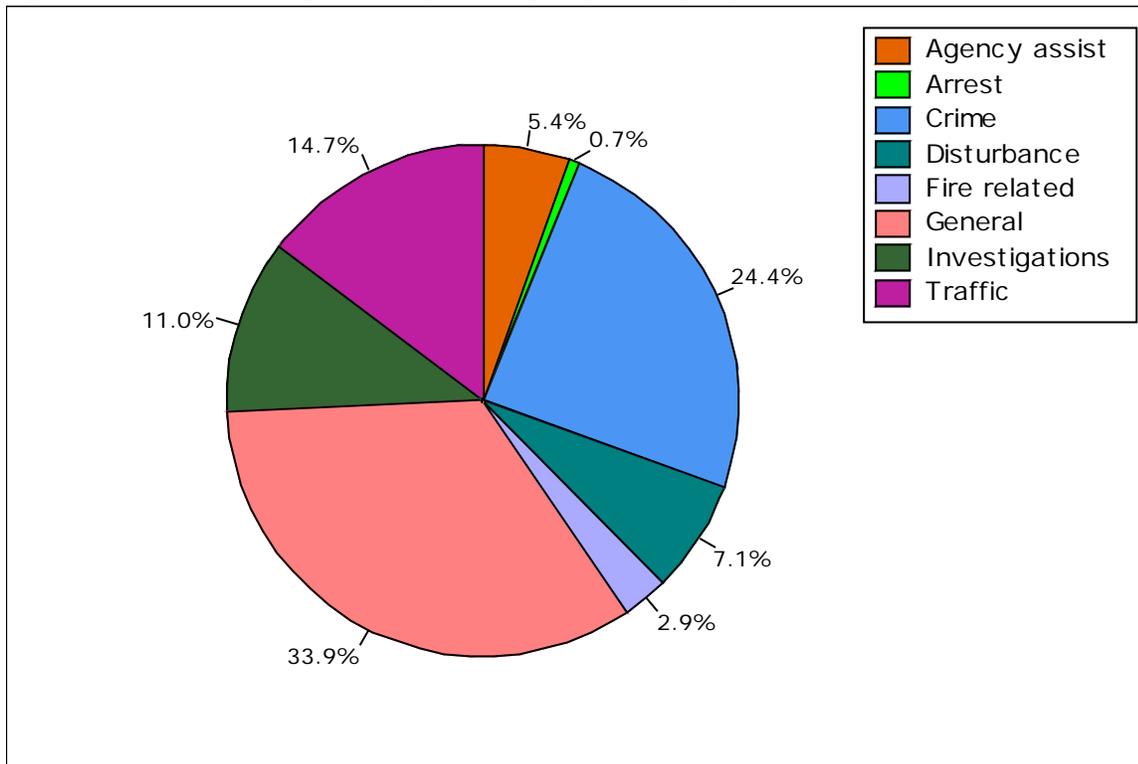
**Table D2: Events per Day, by Category**

Category	Total Events	Events per Day
Accidents	474	1.3
Alarms	663	1.8
Animal calls	49	0.1
Assist other agency	349	1.0
Check/investigation	47	0.1
Crime–persons	709	1.9
Crime–property	913	2.5
Directed patrol	1,904	5.2
Disturbance	457	1.3
EMS	36	0.1
Fire	154	0.4
Miscellaneous	2,129	5.8
Prisoner–arrest	44	0.1
Traffic enforcement	476	1.3
<b>Total</b>	<b>8,404</b>	<b>23.0</b>

## Observations:

- The top four categories (general noncriminal, directed patrol, crime, and traffic) accounted for 79 percent of events.
- 26 percent of events were general noncriminal calls.
- 23 percent of events were directed patrol activities.
- 19 percent of events were crimes.
- 11 percent of events were traffic related.

**Figure D3: Percentage Calls per Day, by Category**



**Note:** The figure combines categories in the following table according to the description in Chart 1.

**Table D3: Calls per Day, by Category**

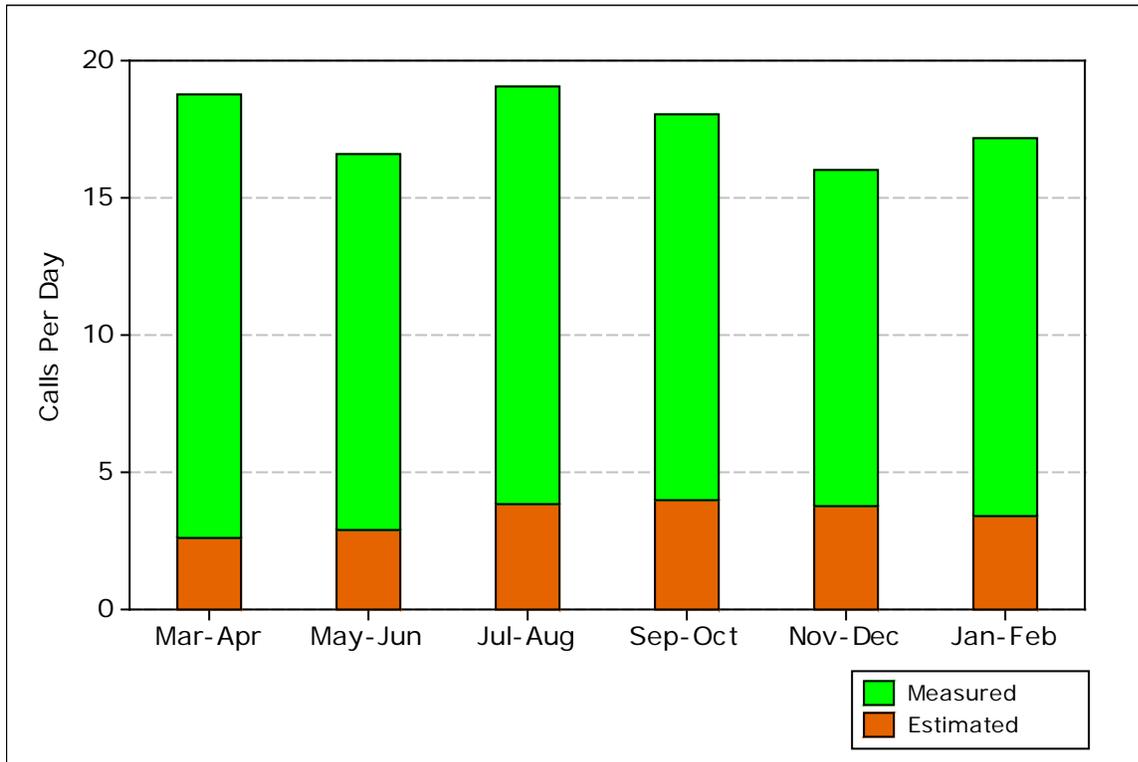
Category	Total Calls	Calls per Day
Accidents	474	1.3
Alarms	663	1.8
Animal calls	49	0.1
Assist other agency	349	1.0
Check/investigation	47	0.1
Crime–persons	692	1.9
Crime–property	874	2.4
Directed patrol	0	0.0
Disturbance	457	1.3
EMS	35	0.1
Fire	151	0.4
Miscellaneous	2,128	5.8
Prisoner–arrest	43	0.1
Traffic enforcement	469	1.3
<b>Total</b>	<b>6,431</b>	<b>17.6</b>

**Note:** The focus here is on recorded calls rather than recorded events. We removed events with zero time on scene and directed-patrol events.

## Observations:

- There was an average of 18 calls per day, or 0.7 per hour.
- The top three categories (general noncriminal, crime, and traffic) accounted for 73 percent of calls.
- 34 percent of calls were general noncriminal calls.
- 24 percent of calls were for crimes.
- 15 percent of calls were traffic related.

**Figure D4: Calls per Day, by Month**



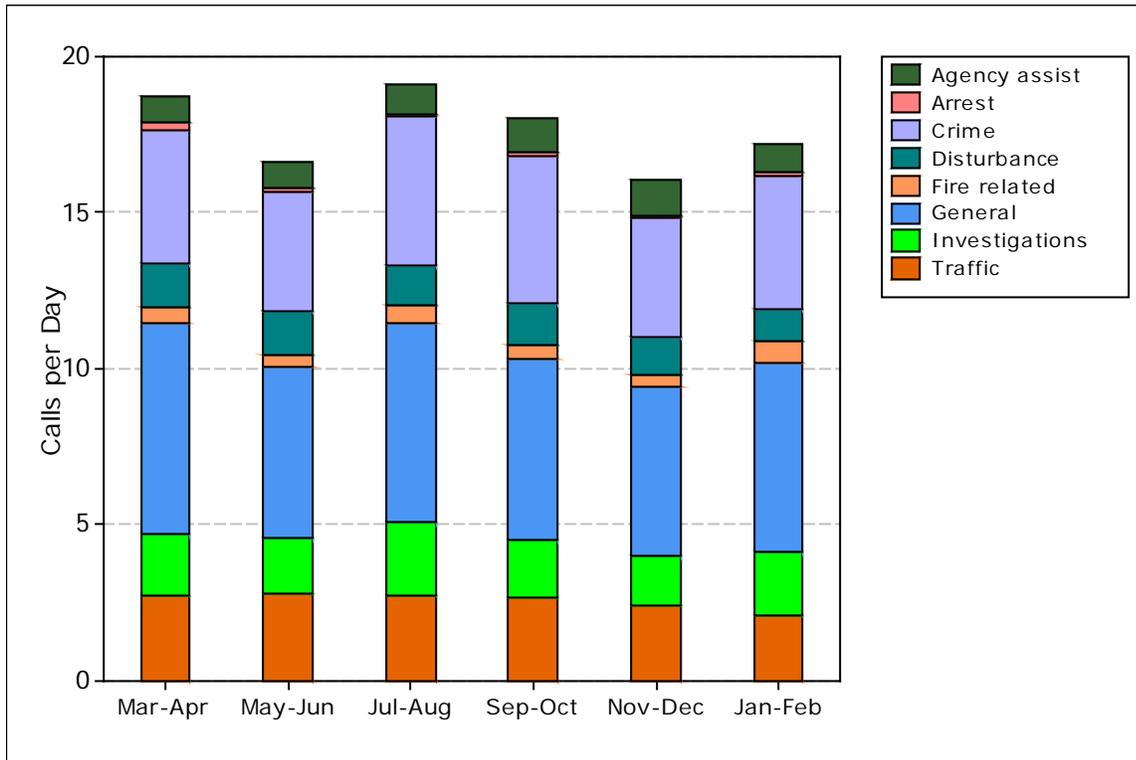
**Table D4: Calls per Day, by Month**

Type	Mar.–Apr.	May–June	July–Aug.	Sept.–Oct.	Nov.–Dec.	Jan.–Feb.
Estimated	2.6	2.9	3.9	4.0	3.8	3.4
Measured	16.1	13.7	15.2	14.0	12.3	13.8
<b>Total</b>	<b>18.7</b>	<b>16.6</b>	<b>19.1</b>	<b>18.0</b>	<b>16.0</b>	<b>17.2</b>

**Observations:**

- The number of calls per day was lowest in November-December.
- The number of calls per day was highest in July-August.
- The months with the most calls had 19 percent more calls than the months with the fewest calls.
- Estimating the time for calls with missing or incorrect time fields added between 2.6 and 4.0 calls per day.

**Figure D5: Calls per Day, by Category and Months**



**Note:** The figure combines categories in the following table according to the description in Chart 1.

**Table D5: Calls per Day, by Category and Months**

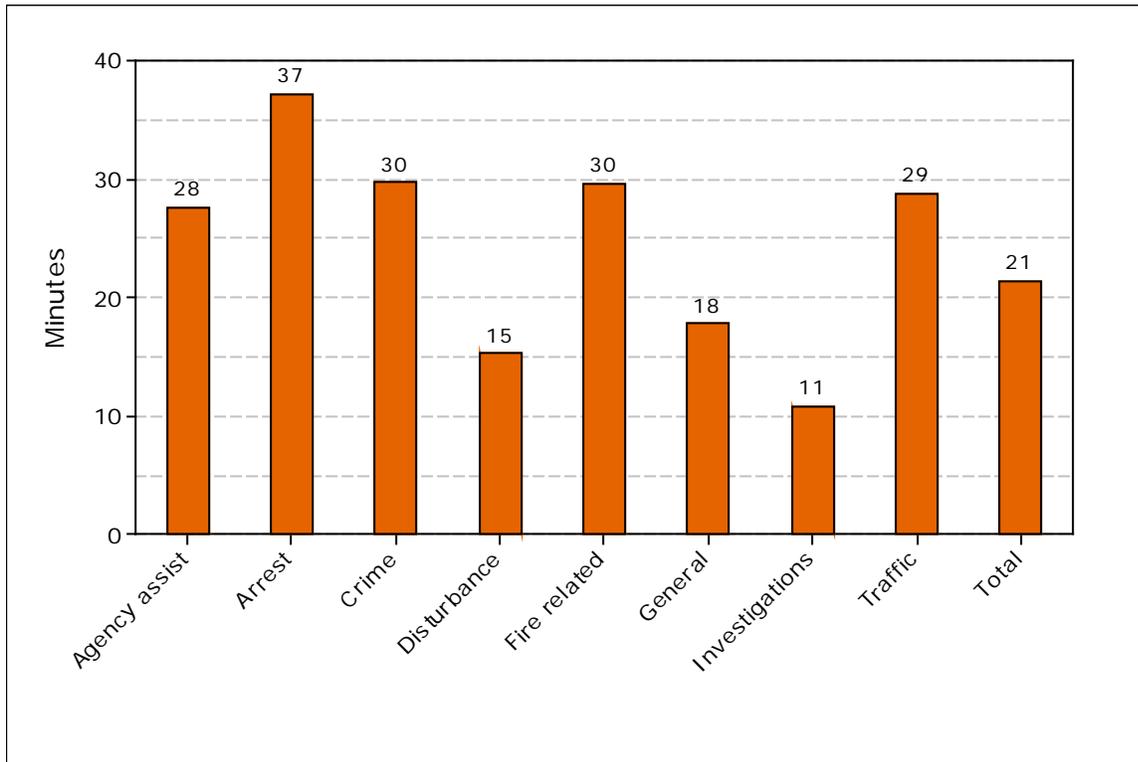
Category	Mar.-Apr.	May-June	Jul.-Aug.	Sep.-Oct.	Nov.-Dec.	Jan.-Feb.
Accidents	1.3	1.5	1.3	1.2	1.3	1.2
Alarms	1.8	1.7	2.2	1.8	1.6	1.8
Animal calls	0.1	0.1	0.2	0.2	0.0	0.2
Assist other agency	0.9	0.9	1.0	1.1	1.1	0.8
Check/investigation	0.1	0.1	0.2	0.0	0.1	0.2
Crime-persons	2.1	1.8	2.0	2.0	1.7	1.8
Crime-property	2.2	2.1	2.8	2.8	2.1	2.4
Disturbance	1.4	1.3	1.2	1.3	1.2	1.0
EMS	0.0	0.1	0.1	0.1	0.0	0.2
Fire	0.5	0.3	0.5	0.3	0.4	0.5
Miscellaneous	6.7	5.4	6.1	5.6	5.3	5.9
Prisoner-arrest	0.3	0.1	0.1	0.1	0.1	0.1
Traffic enforcement	1.4	1.3	1.4	1.5	1.1	0.9
<b>Total</b>	<b>18.7</b>	<b>16.6</b>	<b>19.1</b>	<b>18.0</b>	<b>16.0</b>	<b>17.2</b>

**Note:** Calculations were limited to calls rather than events.

## Observations:

- The top three categories (general noncriminal, crime, and traffic) averaged between 72 and 73 percent of calls throughout the year.
- General noncriminal calls averaged between 5.4 and 6.7 calls per day throughout the year.
- Crime calls averaged between 3.8 and 4.8 calls per day throughout the year and accounted for 23 to 26 percent of total calls
- Traffic-related calls averaged between 2.1 and 2.8 calls per day throughout the year.

**Figure D6: Average Occupied Times, by Category**



**Note:** The figure combines categories using weighted averages from the following table according to the description in Chart 1.

**Table D6: Average Occupied Times, by Category**

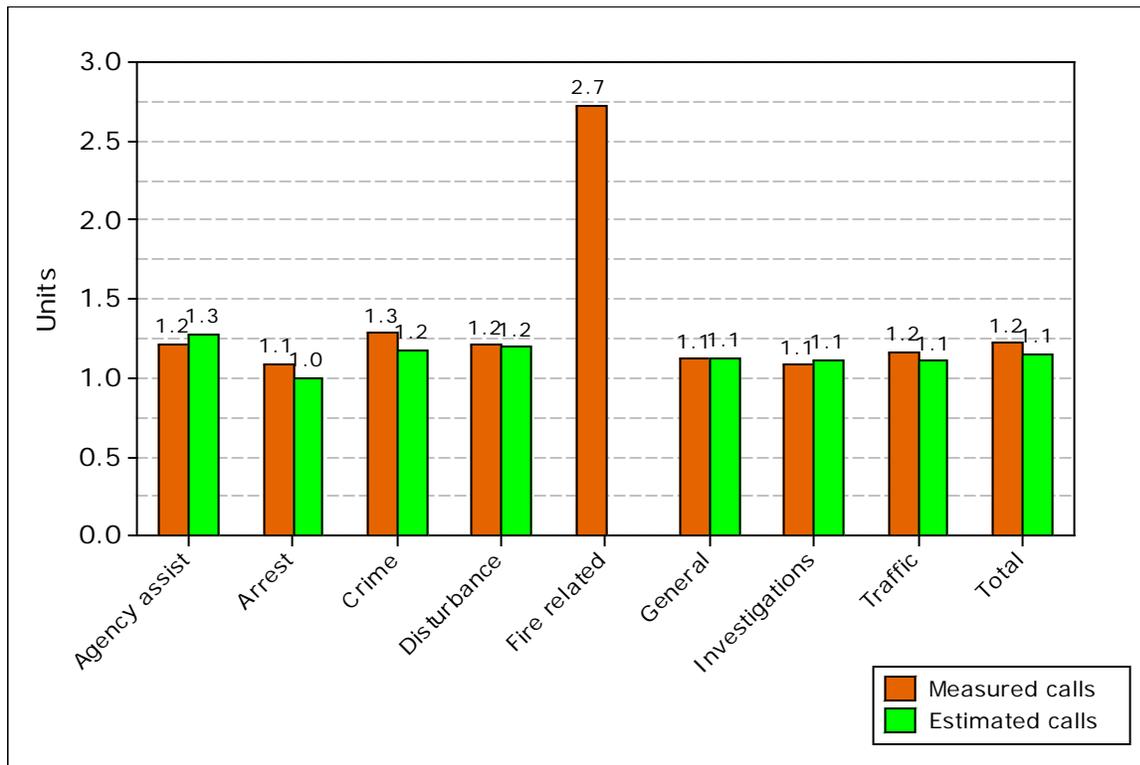
Category	Minutes	Total Calls
Accidents	32.3	352
Alarms	10.2	625
Animal calls	20.0	37
Assist other agency	27.6	291
Check/investigation	23.4	32
Crime–persons	31.5	461
Crime–property	28.0	520
Disturbance	15.3	424
EMS	38.9	35
Fire	27.4	149
Miscellaneous	17.7	1,925
Prisoner–arrest	37.1	34
Traffic enforcement	24.0	264
<b>Total</b>	<b>21.4</b>	<b>5,149</b>

**Notes:** A unit's "occupied time" is measured as the time from when a unit is dispatched until the unit becomes available. We removed 33 calls with inaccurate occupied times. The information in Figure D6 and Table D6 is limited to calls and excludes all events that show zero time on scene either due to incorrect data entry or due to call cancellation. We used these occupied times to estimate the occupied times on calls that had zero time on scene, enabling us to include those calls within our workload calculations.

### Observations:

- A unit's average time spent on a call ranged from 10 to 39 minutes overall.
- The longest average time of 39 minutes was for fire-related EMS calls.
- The average time spent on crime calls was 30 minutes.
- The average time spent on fire-related calls was 30 minutes.

**Figure D7: Number of Responding Units, by Category**

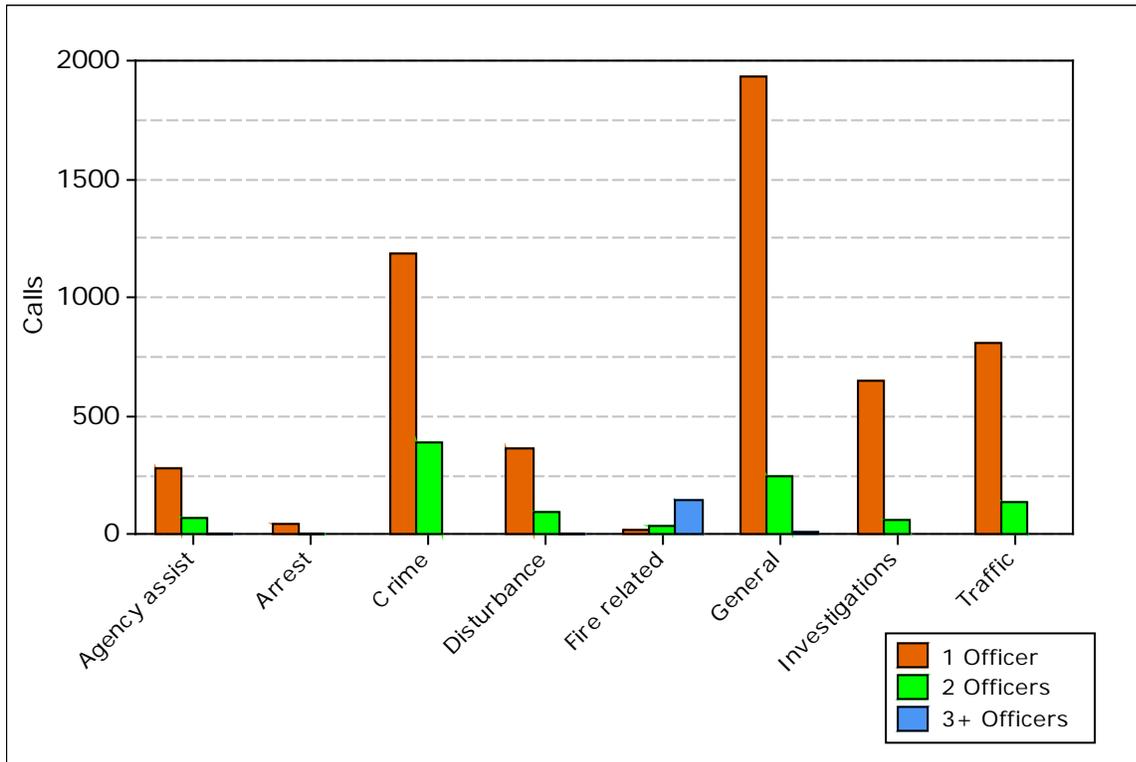


**Note:** The categories in this figure use weighted averages to combine those of the following table according to the description in Chart 1.

**Table D7: Average Number of Responding Units, by Category**

Category	Estimated calls		Measured calls	
	Average	Total Calls	Average	Total Calls
Accidents	1.0	122	1.0	352
Alarms	1.2	38	1.1	625
Animal calls	1.1	11	1.1	38
Assist other agency	1.3	55	1.2	294
Check/investigation	1.0	15	1.1	32
Crime—persons	1.3	224	1.4	468
Crime—property	1.1	346	1.2	528
Disturbance	1.2	31	1.2	426
EMS	NA	0	2.5	35
Fire	NA	0	2.8	151
Miscellaneous	1.1	193	1.1	1,935
Prisoner—arrest	1.0	9	1.1	34
Traffic enforcement	1.2	205	1.3	264
<b>Total</b>	<b>1.1</b>	<b>1,249</b>	<b>1.2</b>	<b>5,182</b>

**Figure D8: Number of Responding Units, by Category**



**Table D8: Number of Responding Units, by Category, All Calls**

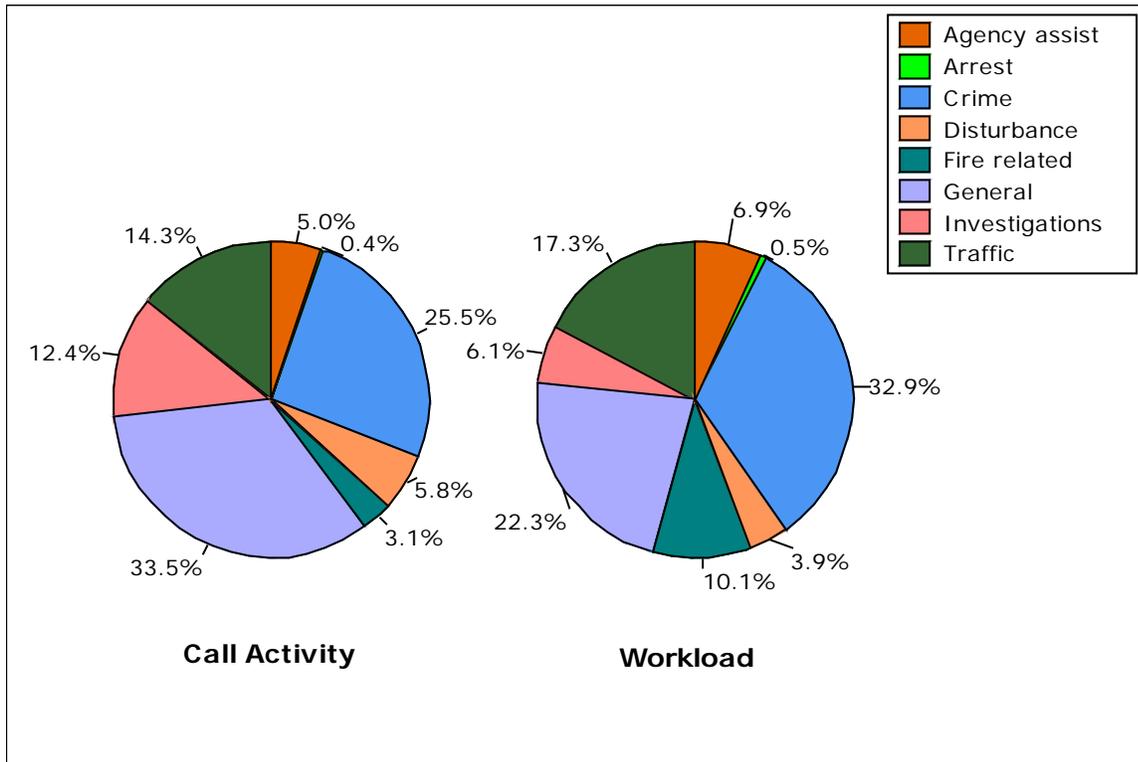
Category	Responding Units		
	One	Two	Three or More
Accidents	454	20	0
Alarms	606	57	0
Animal calls	45	4	0
Assist other agency	275	70	4
Check/investigation	43	4	0
Crime—persons	446	246	0
Crime—property	737	137	0
Disturbance	363	93	1
EMS	7	5	23
Fire	7	25	119
Miscellaneous	1,884	238	6
Prisoner—arrest	40	3	0
Traffic enforcement	353	116	0
<b>Total</b>	<b>5,260</b>	<b>1,018</b>	<b>153</b>

**Note:** The information in Tables D7 and D8 and Figures D7 and D8 is limited to calls and excludes events with zero time on scene as well as directed patrol activities.

## Observations:

- The overall mean number of responding units was 1.1 for calls with estimated times and 1.2 for measured calls.
- The mean number of responding units was highest for fire calls with an average of 2.8 units responding.
- 82 percent of calls involved one responding unit.
- 16 percent of calls involved two responding units.
- 2 percent of other-initiated calls involved three or more units.
- The largest group of calls with three or more responding units involved fire calls.

**Figure D9: Percentage Calls and Work Hours, by Category, Summer 2012**



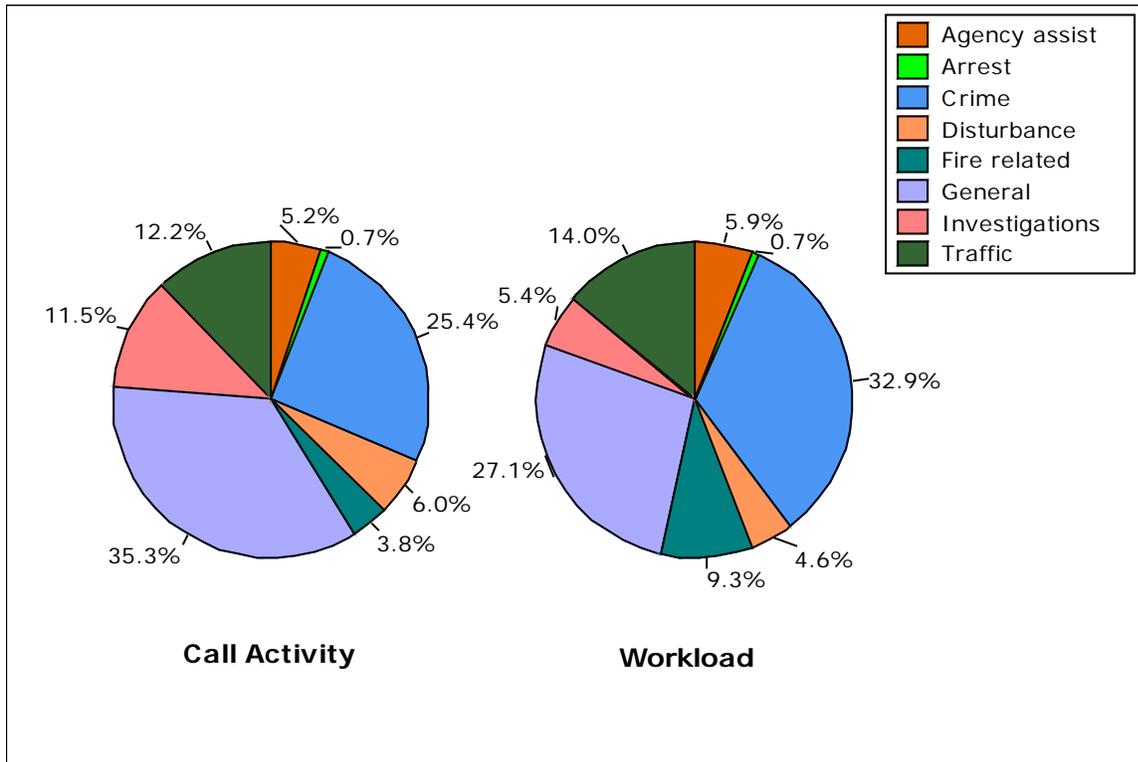
**Table D9: Calls and Work Hours per Day, by Category, Summer 2012**

Category	Per Day	
	Calls	Work Hours
Arrest	0.1	0.0
Assist other agency	0.9	0.6
Crime	4.8	3.0
Disturbance	1.1	0.4
Fire related	0.6	0.9
General noncriminal	6.3	2.0
Investigations	2.3	0.6
Traffic	2.7	1.6
<b>Total</b>	<b>18.8</b>	<b>9.1</b>

## Observations:

- The average number of calls per day was higher in summer than in the winter. The summer workload was greater than in winter. Total calls averaged 18.8 per day, or 0.8 per hour.
- Total workload averaged 9.1 hours per day, meaning that on average 0.4 officers per hour were busy responding to calls.
- General noncriminal calls constituted 34 percent of calls and 22 percent of workload.
- Crime calls constituted 26 percent of calls and 33 percent of workload.
- Traffic calls constituted 14 percent of calls and 17 percent of workload.
- These top three categories constituted 73 percent of calls and 73 percent of workload.

**Figure D10: Percentage Calls and Work Hours, by Category, Winter 2013**



**Table D10: Calls and Work Hours per Day, by Category, Winter 2013**

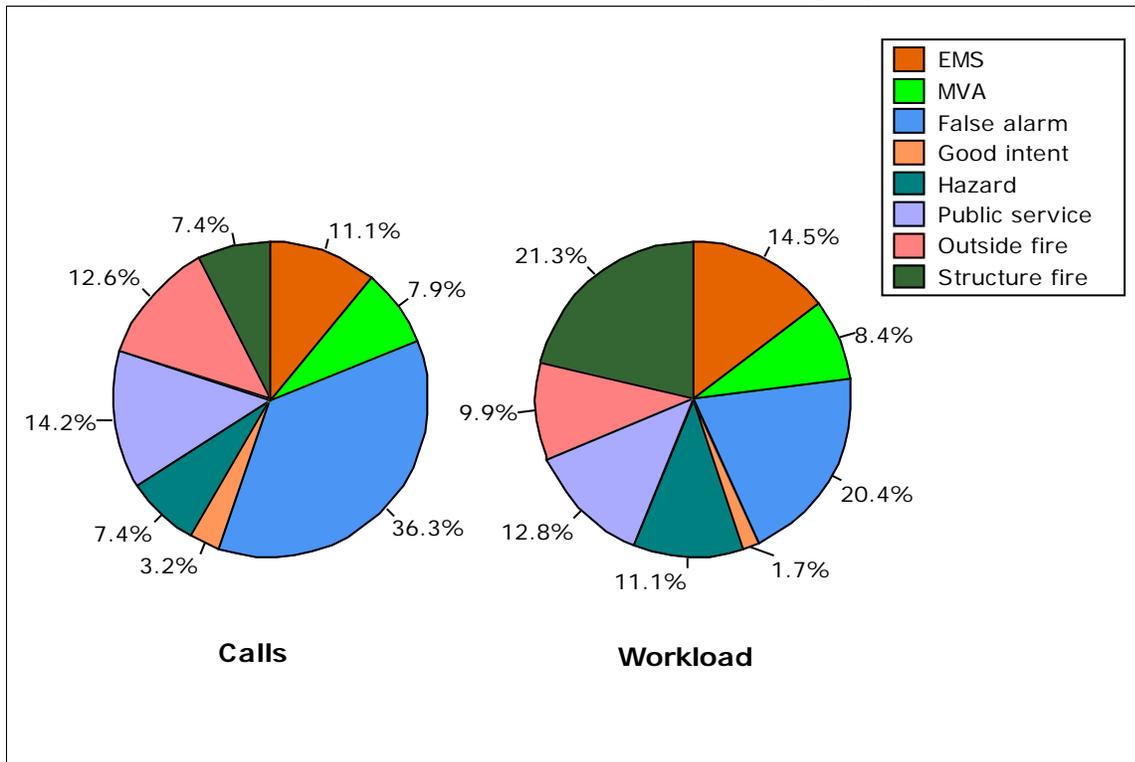
Category	Per Day	
	Calls	Work Hours
Arrest	0.1	0.1
Assist Other Agency	0.9	0.5
Crime	4.4	2.6
Disturbance	1.0	0.4
Fire related	0.7	0.7
General noncriminal	6.1	2.2
Investigations	2.0	0.4
Traffic	2.1	1.1
<b>Total</b>	<b>17.3</b>	<b>7.9</b>

**Note:** Workload calculations focused on calls rather than events.

## Observations:

- Total calls averaged 17 per day, or 0.7 per hour.
- Total workload averaged 8 hours per day, meaning that on average 0.3 officers per hour were busy responding to calls.
- General noncriminal calls constituted 35 percent of calls and 27 percent of workload.
- Crime calls constituted 25 percent of calls and 33 percent of workload.
- Traffic calls constituted 12 percent of calls and 14 percent of workload.
- These top three categories constituted 73 percent of calls and 74 percent of workload.

**Figure D11: Fire-related Calls and Workload, by Category**



**Table D11: Fire-related Calls and Workload, by Category**

Category	Calls	Runs	Work Hours	Minutes per Run
EMS	21	52	36.7	42.3
MVA	14	37	21.1	34.1
<b>EMS Total</b>	<b>35</b>	<b>89</b>	<b>57.8</b>	<b>38.9</b>
False alarm	65	195	51.4	15.8
Good intent	6	16	4.4	16.3
Hazard	14	42	28.0	40.0
Public service	27	68	32.2	28.4
Outside fire	23	59	24.9	25.3
Structure fire	14	43	53.8	75.0
<b>Fire Total</b>	<b>149</b>	<b>423</b>	<b>194.7</b>	<b>27.6</b>
<b>Overall Total</b>	<b>184</b>	<b>512</b>	<b>252.4</b>	<b>29.6</b>

**Note:** Two calls involving a total of six responding units were removed this table. Both calls had inaccurate occupied times exceeding 24 hours.

## Observations:

- Fire-related activities involved 184 incidents and 512 responding units, or approximately one call every two days.
- Total annual workload was 252 hours or 41 minutes per day.
- Medical calls (general medical and motor vehicle accidents) were 19 percent of total fire-related calls and 23 percent of associated workload.
- Structure and outside fire calls were 20 percent of total fire-related calls and 31 percent of associated workload.

**Table D12: Fire-related Workload, by Unit**

<b>Unit</b>	<b>Runs</b>	<b>Minutes per Run</b>	<b>Hours</b>
Engine 1	170	29.2	82.7
Engine 2	156	29.0	75.4
Ladder Truck	30	34.0	17.0
Engine 3	156	29.8	77.4

**Note:** Two calls involving a total of six responding units were removed this table. Both calls had inaccurate occupied times exceeding 24 hours.

**Observations:**

- Engine 1 responded to the most calls during the year with 170 runs; it had an annual workload of 82.7 hours.
- The department’s ladder truck responded to the fewest calls during the year with 30 runs; it had an annual workload of 17.0 hours.

## Deployment

For this study, we examined deployment information for eight weeks in the summer from July 6 through August 30, 2012, and eight weeks in the winter from January 4 through February 28, 2013. The public safety department's main patrol force is scheduled on two twelve-hour shifts that start at 7 a.m. and 7 p.m.

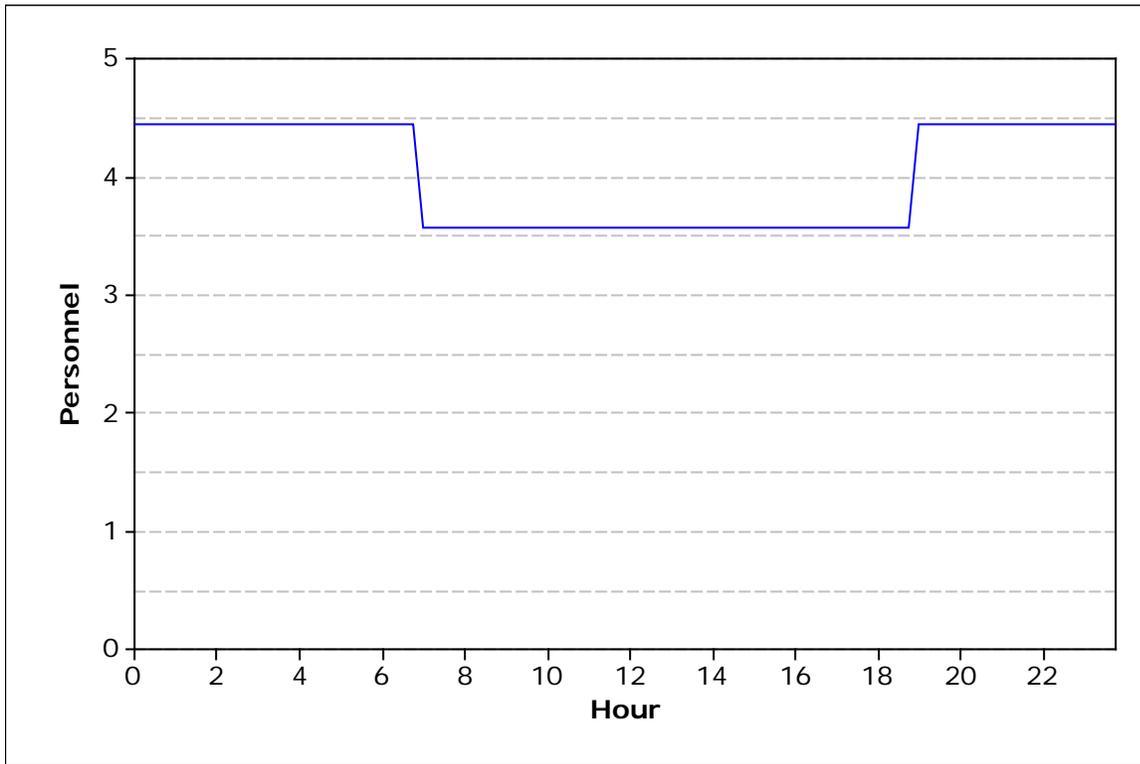
Walterboro Public Safety's main patrol force includes patrol officers, corporals, and sergeants. The department deployed an average of 4.0 officers per hour during the 24-hour day in summer 2012 and 3.8 officers per hour during the 24-hour day in winter 2013.

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

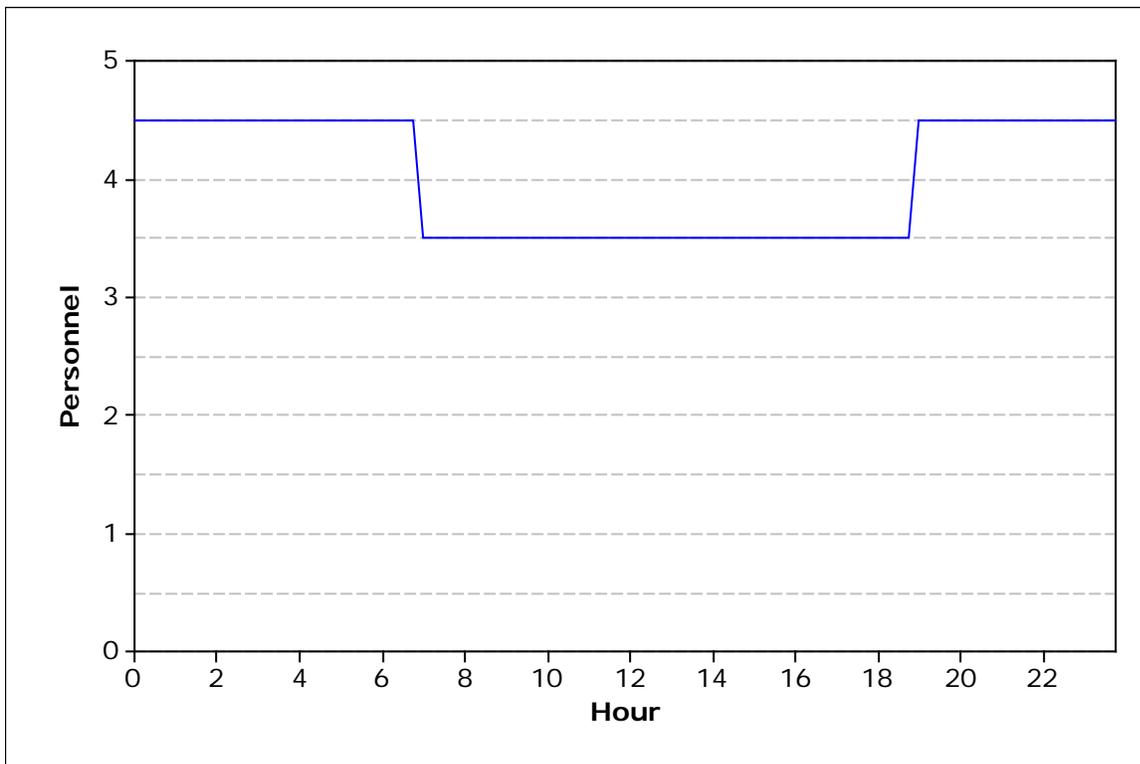
- First, we focus on patrol deployment alone.
- Next, we compare the deployment against workload based upon calls for service.
- Finally, we draw a comparison based upon "all" workload, which includes calls for service and directed patrol activities.

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

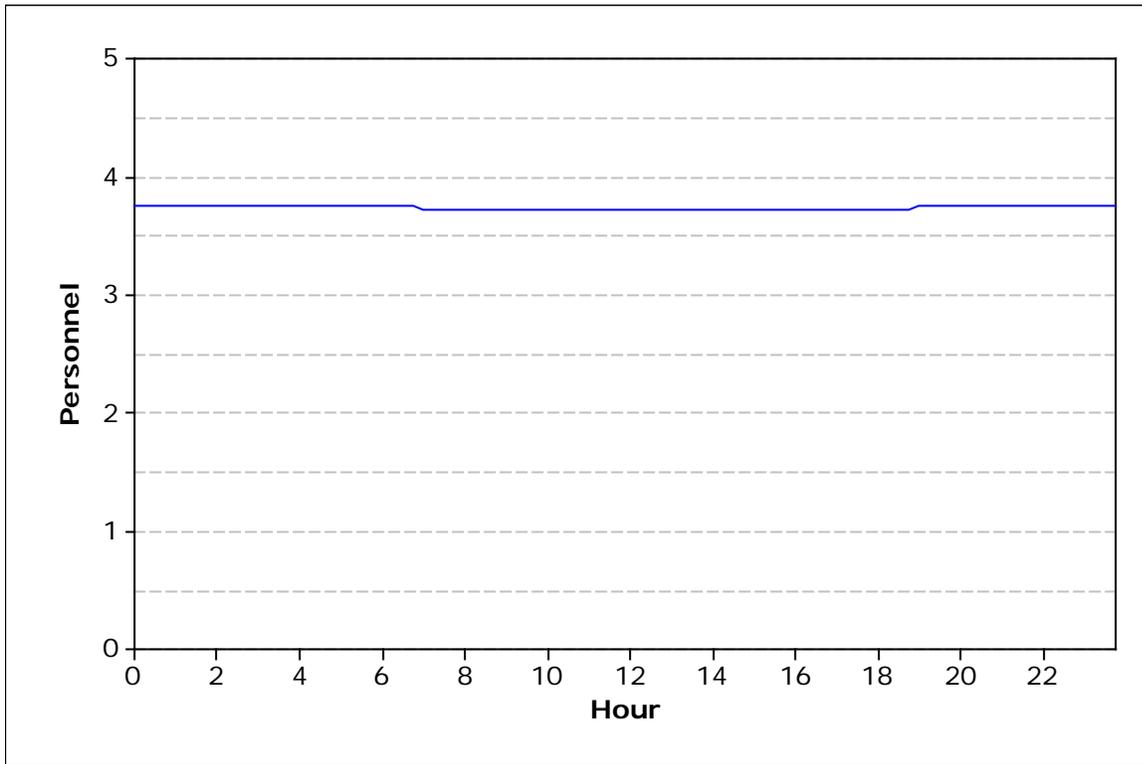
**Figure D12: Deployed Officers, Weekdays, Summer 2012**



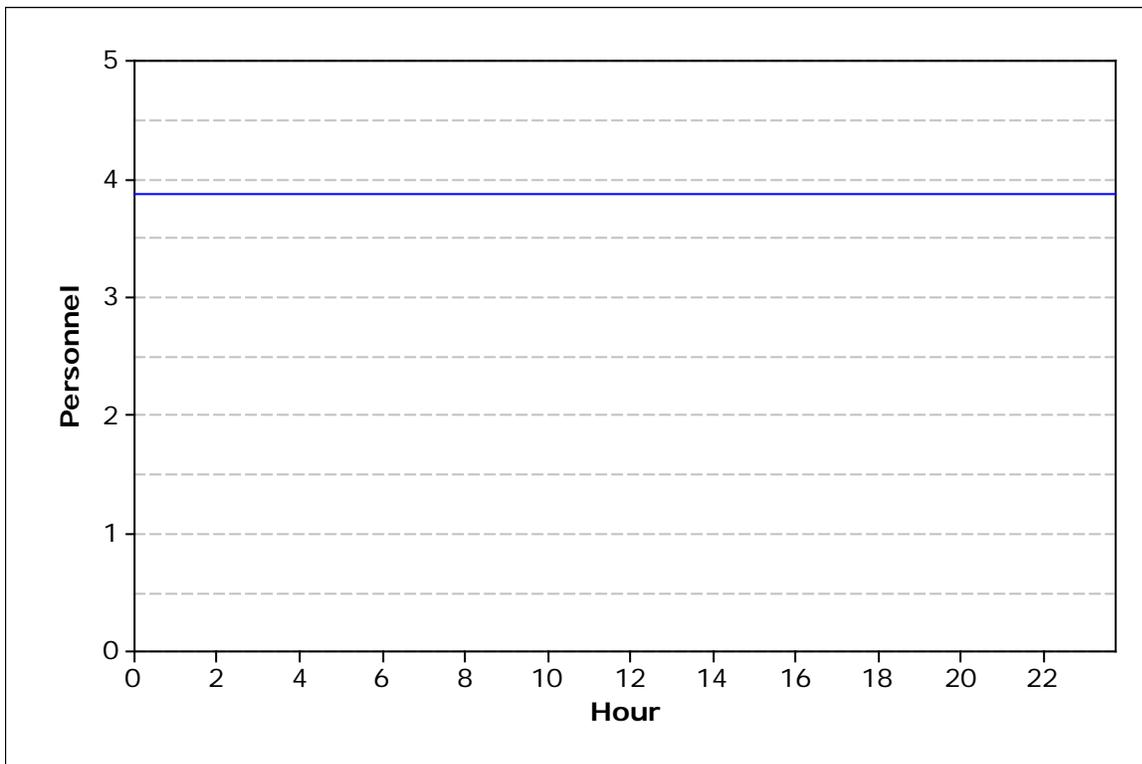
**Figure D13: Deployed Officers, Weekends, Summer 2012**



**Figure D14: Deployed Officers, Weekdays, Winter 2013**



**Figure D15: Deployed Officers, Weekends, Winter 2013**



## Observations:

- For summer 2012:
  - The average deployment was 4.0 officers per hour during the week and on weekends.
  - Average deployment varied from 3.6 to 4.5 officers per hour on weekdays and 3.5 to 4.5 officers per hour on weekends.
- For winter 2013:
  - The average deployment was 3.7 officers per hour during the week and 3.9 officers per hour on weekend.
  - Average deployment varied from 3.7 to 3.8 officers per hour on weekdays and did not vary on weekends.

Figure D16: Deployment and Main Workload, Weekdays, Summer 2012

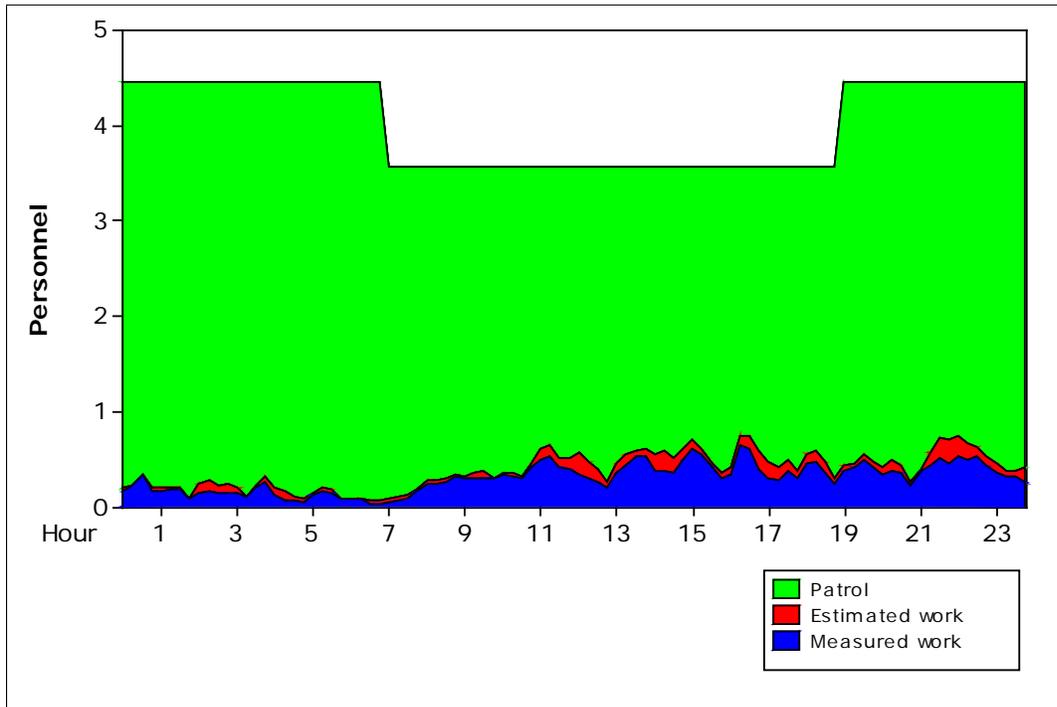
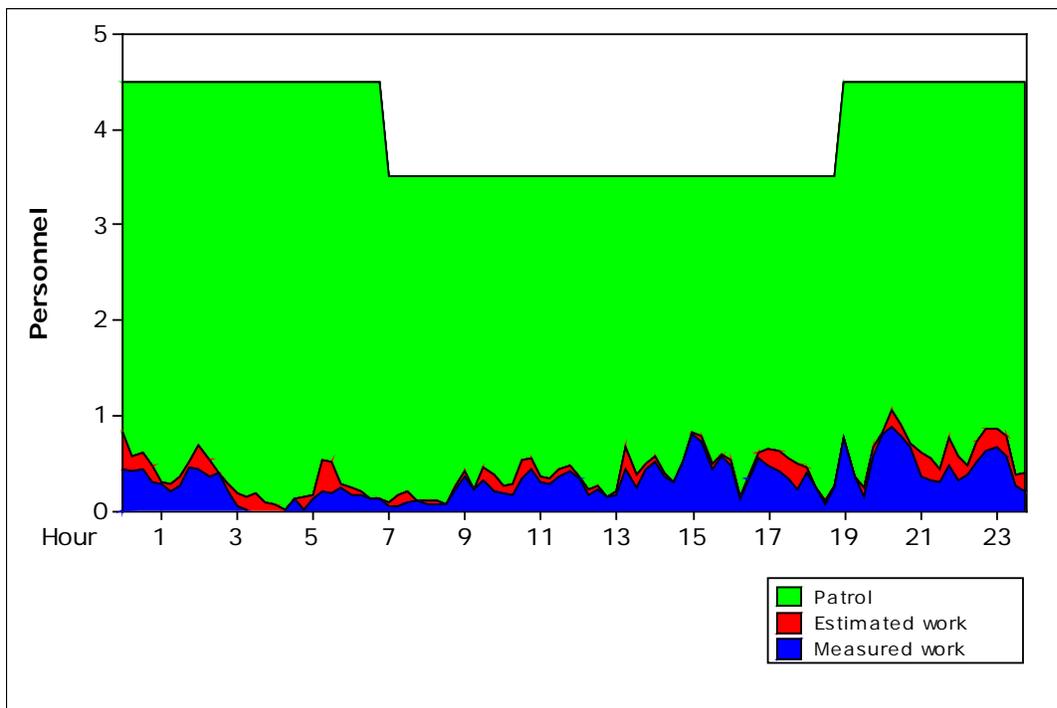
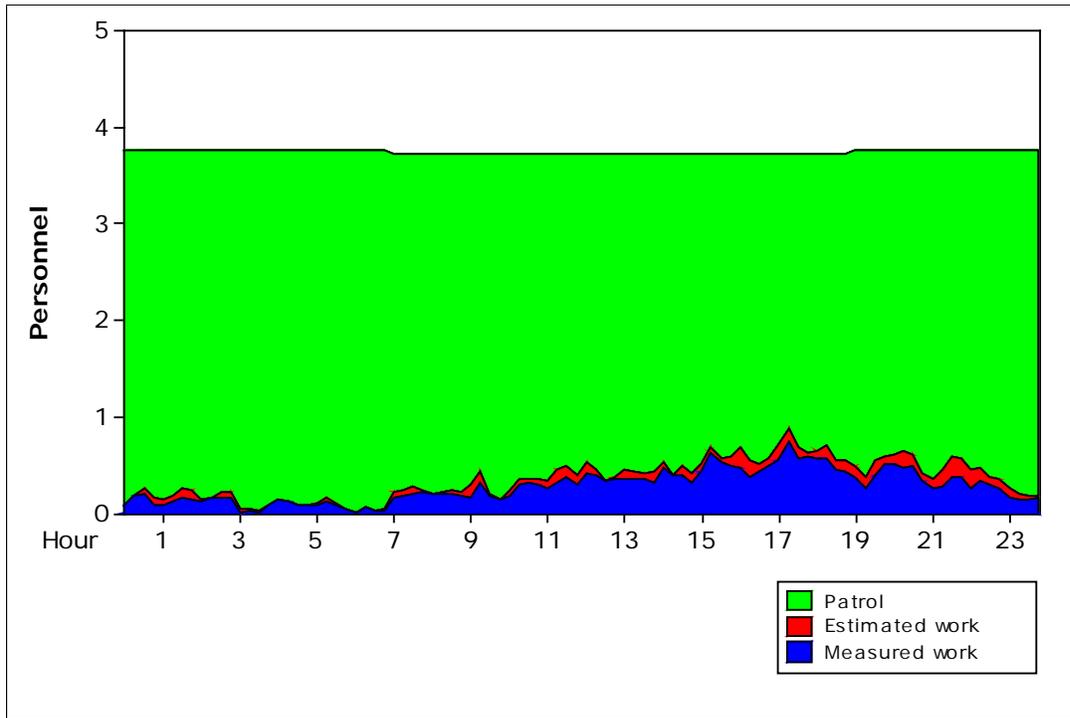


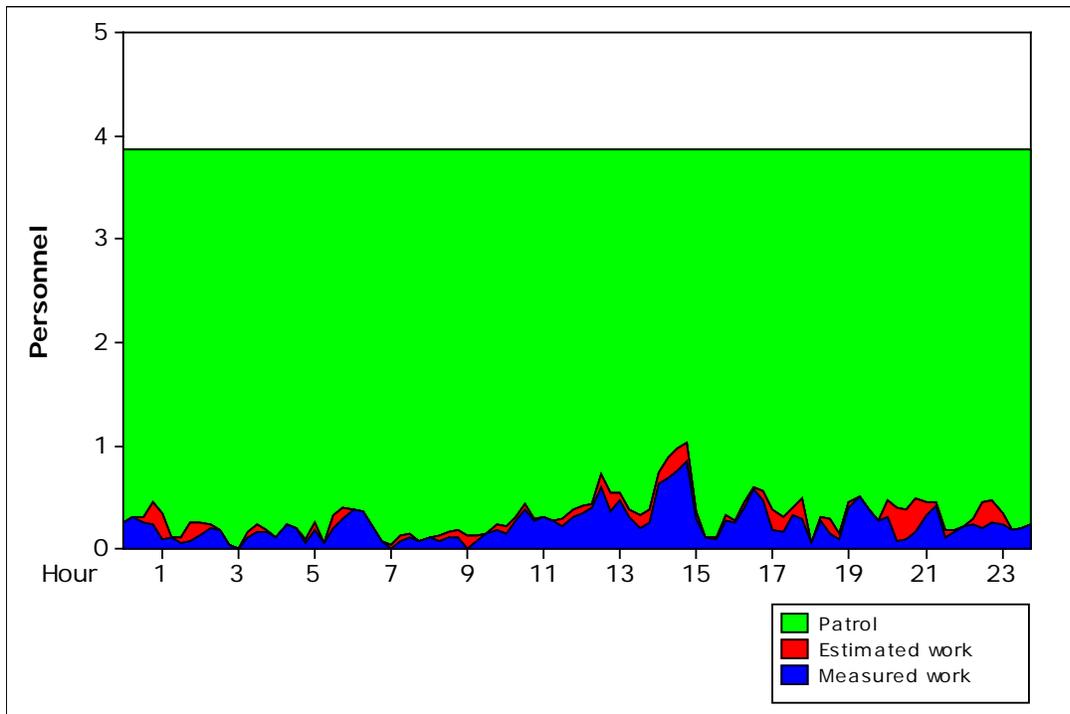
Figure D17: Deployment and Main Workload, Weekends, Summer 2012



**Figure D18: Deployment and Main Workload, Weekdays, Winter 2013**



**Figure D19: Deployment and Main Workload, Weekends, Winter 2013**



**Note:** Figures D16-D19 include deployment along with workload from calls for service, including calls for which occupied times were estimated.

## Observations:

- For summer 2012:
  - Average workload was 0.4 officers per hour during the week and on weekends.
  - This was approximately 9 percent of hourly deployment during the week and 10 percent of hourly deployment on weekends.
  - During the week, workload reached a maximum of 21 percent of deployment between 4:30 p.m. and 4:45 p.m.
  - On weekends, workload reached a maximum of 23 percent of deployment between 3:00 p.m. and 3:15 p.m. and between 8:15 p.m. and 8:30 p.m.
- For winter 2013:
  - Average workload was 0.3 officers per hour during the week and on weekends.
  - This was approximately 9 percent of hourly deployment during the week and 8 percent of hourly deployment on weekends.
  - During the week, workload reached a maximum of 24 percent of deployment between 5:15 p.m. and 5:30 p.m.
  - On weekends, workload reached a maximum of 27 percent of deployment between 2:45 p.m. and 3:00 p.m.

Figure D20: Deployment and All Workload, Weekdays, Summer 2012

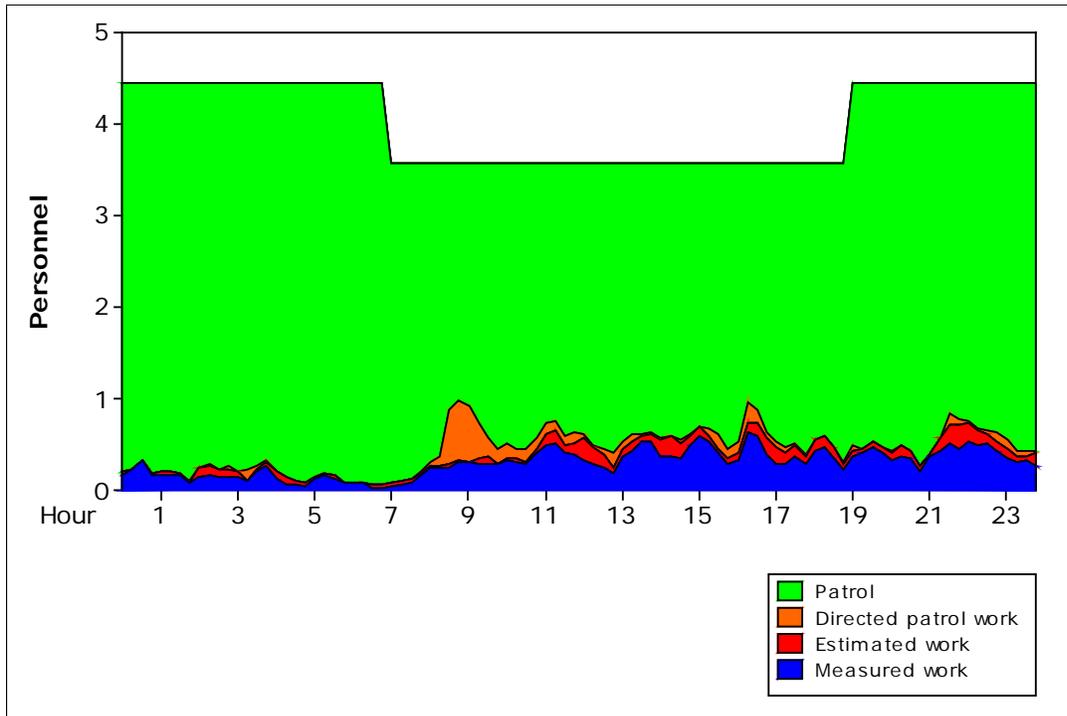


Figure D21: Deployment and All Workload, Weekends, Summer 2012

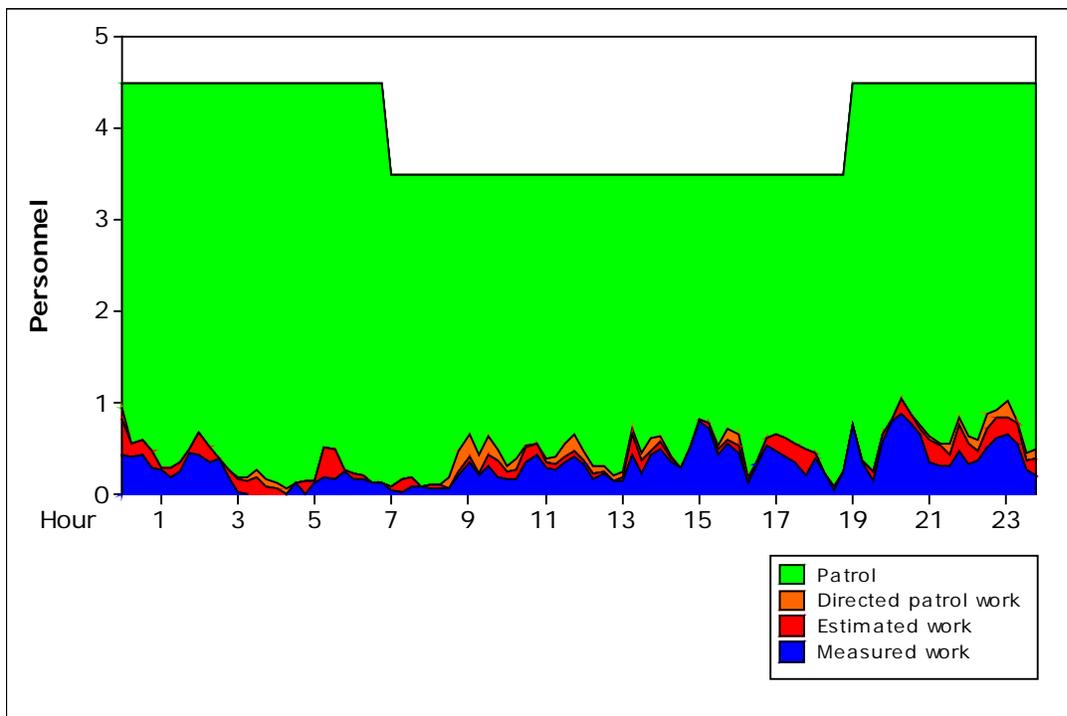


Figure D22: Deployment and All Workload, Weekdays, Winter 2013

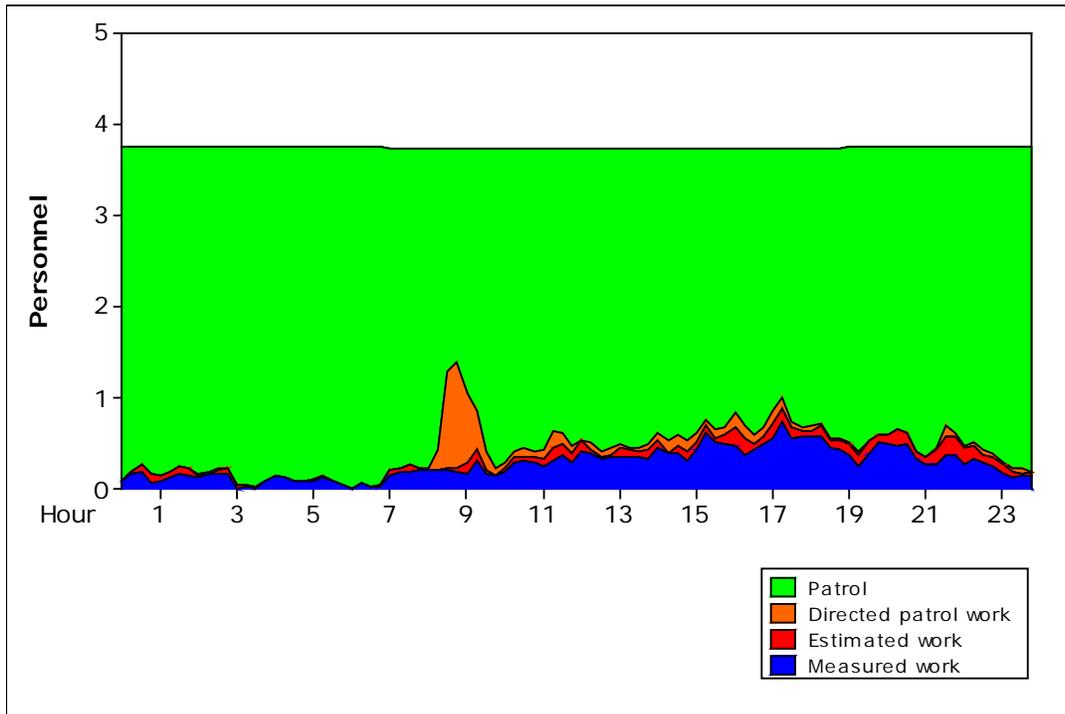
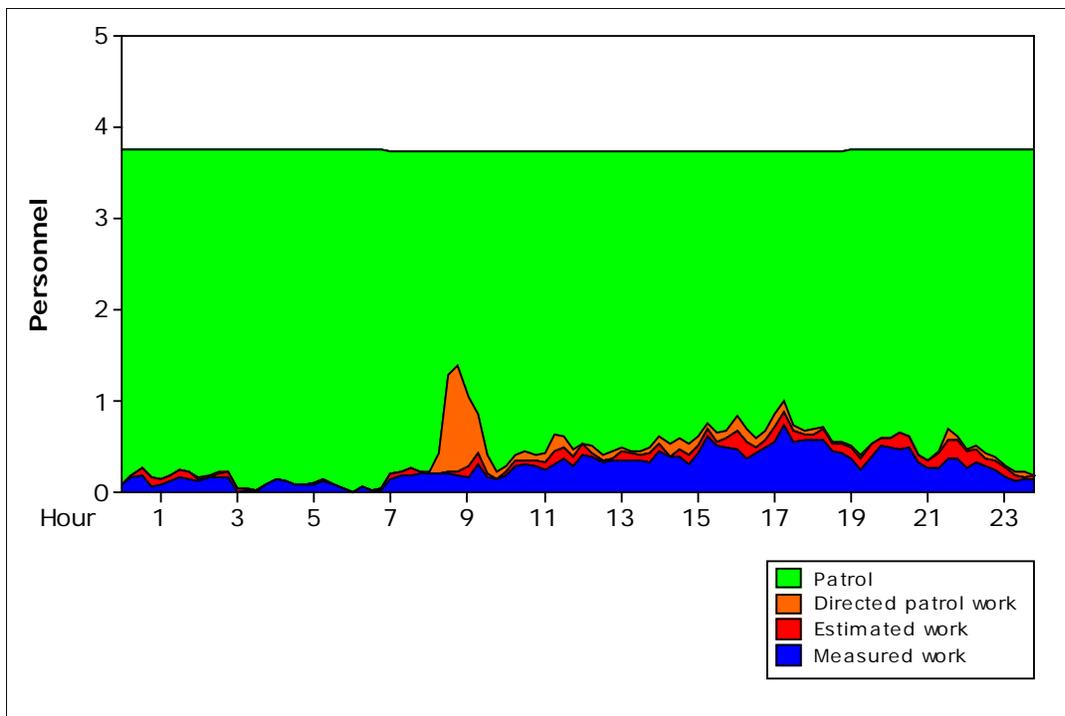


Figure D23: Deployment and All Workload, Weekends, Winter 2013



**Note:** Figures D20-D23 include deployment along with all workload from calls for service and directed patrol activities.

## Observations:

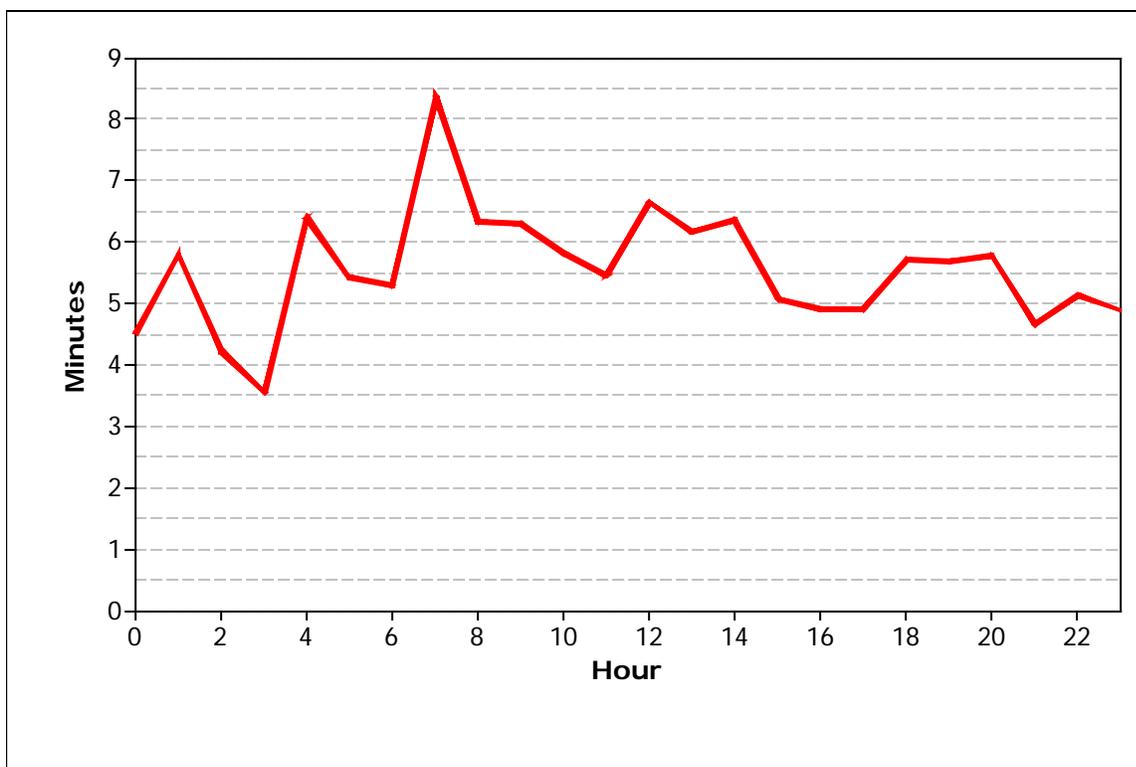
- For summer 2012:
  - Average workload was 0.4 officers per hour during the week and 0.5 officers per hour on weekends.
  - This was approximately 11 percent of hourly deployment during the week and on weekends.
  - During the week, workload reached a maximum of 27 percent of deployment between 8:45 a.m. and 9:00 a.m.
  - On weekends, workload reached a maximum of 23 percent of deployment between 3:00 p.m. and 3:15 p.m.
- For winter 2013:
  - Average workload was 0.4 officers per hour during the week and on weekends.
  - This was approximately 11 percent of hourly deployment during the week and 9 percent of hourly deployment on weekends.
  - During the week, workload reached a maximum of 37 percent of deployment between 8:45 a.m. and 9:00 a.m.
  - On weekends, workload reached a maximum of 29 percent of deployment between 9:15 a.m. and 9:30 a.m.

## Response Times

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

Response time is measured as the difference between when a call is received and when the first unit arrives on scene. We usually divide the response time into dispatch delay and travel time. For Walterboro, the response time was restricted to the travel time as we did not have accurate call received and dispatch times. We restricted our response time analysis to calls with valid arrival times and nonzero response times. This gave us a sample of 872 calls.

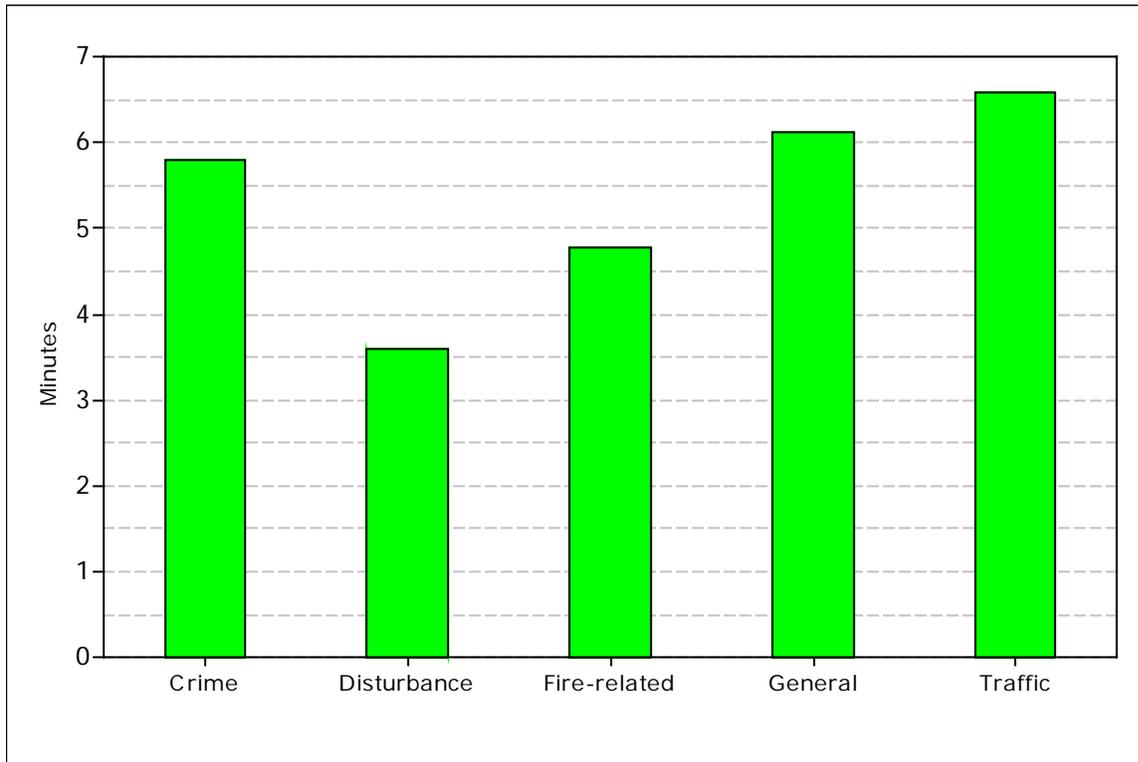
**Figure D24: Average Response Time, by Hour of Day**



### Observations:

- Average response time varied between 3.6 minutes and 8.4 minutes by hour of day with an overall average of 5.6 minutes.
- The longest average response time was between 7:00 a.m. and 8:00 a.m., with an average of approximately 8.4 minutes.
- The shortest average response time was between 3:00 and 4:00 a.m., with an average of approximately 3.6 minutes.

**Figure D25: Average Response Time, by Category**



**Table D13: Response Time Measures, by Category**

Category	Average	90th Percentile	Count
Crime	5.8	10.0	618
Disturbance	3.6	7.2	15
Fire related	4.8	8.0	172
General noncriminal	6.1	14.3	16
Traffic	6.6	12.1	48
<b>Total</b>	<b>5.6</b>	<b>10.0</b>	<b>869</b>

**Note:** The total average is weighted according to the number of calls within each category. We removed arrest calls, assist other agency calls, and investigations from this calculation because there are fewer than five valid calls within each of these categories.

**Observations:**

- Average response times varied between 3.6 minutes for disturbances and 6.6 minutes for traffic-related calls.
- The 90th percentile values for response times varied between 7.2 minutes for disturbances and 14.3 minutes for general noncriminal calls.

**Table D14: Response Times, by Fire-related Category**

<b>Category</b>	<b>Average</b>	<b>90th Percentile</b>	<b>Sample Size</b>
EMS	6.1	11.8	20
MVA	3.5	5.5	14
<b>EMS Total</b>	<b>5.0</b>	<b>10.0</b>	<b>34</b>
False alarm	4.3	6.3	56
Good intent	6.2	10.0	6
Hazard	5.0	9.0	14
Public service	4.7	7.5	24
Outside fire	4.9	10.5	24
Structure fire	5.4	9.5	14
<b>Fire Total</b>	<b>4.7</b>	<b>8.0</b>	<b>138</b>
<b>Overall Total</b>	<b>4.8</b>	<b>8.0</b>	<b>172</b>

**Observations:**

- The average response time for fire-related calls was 4.8 minutes, while the 90th percentile response time was 8.0 minutes.
- Average response times varied by category between 3.5 and 6.2 minutes.

*END*