

Police Department Staffing Study
TOWNSHIP OF LAWRENCE, NEW JERSEY



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1. INTRODUCTION AND EXECUTIVE SUMMARY

The Township of Lawrence retained the Matrix Consulting Group to conduct a Police Department Staffing Study in the winter and spring of 2011. This project was initiated following several years of fiscal pressure on the Township. The focus of the study, as expressed in the request for proposals, is to ensure that the Department is operating as efficiently as possible while providing for appropriate services levels throughout the Township.

1. INTRODUCTION

The request for proposals was issued in late 2010 and required potential firms to provide a detailed scope of services, qualifications and other information. Within the document, the Township described the primary objectives of the study, as follows:

1. **Table of Organization.** Review the ratio of Superior Officers to line personnel.
2. **Workload Analysis.** Conduct a review of workload data for determining if current resources of first responders are sufficient.
3. **Work Schedule.** Conduct review and analysis of current Police Department work shift configuration and rotation of shifts and identification of all cost benefits of available alternatives and recommended shift configurations.

The Matrix Consulting Group utilized a systematic approach to conducting this management, organization and staffing study of the Police Department for the Township. In reaching the concluding point of the study, the project team has assembled this final report that summarizes our findings, conclusions and recommendations, where appropriate. This report represents the conclusion of several months of analysis focusing on the organizational structure, staffing and operations of the Police Department. The primary focus of this study was on the

necessary level of staffing – of particular concern as the Township is struggling to balance revenues with competing demands for services – placing the spotlight on the public safety services of the Township due to their large share of the local government budget.

The scope of this assignment was focused on the organization (command staffing), line staffing and operations of the Lawrence Township Police Department (LTPD). In this study, the Matrix Consulting Group's project team utilized a wide variety of data collection and analytical techniques. The project team conducted the following data collection and analytical activities:

- The project manager interviewed each member of the Township Council individually. These interviews were used to identify community concerns regarding service delivery, staffing and finances.
- The project team also utilized an intensive process of interviewing staff in every Police Department function and collecting a wide variety of data designed to document workloads, costs and service levels. Members of the project team individually interviewed over one-quarter of staff on each shift and function. These interviews included not only managers and supervisors, but also many line staff.
- The project team developed a descriptive summary, or profile, of each function in the LTPD – reflecting organizational structure, staffing, workloads, service levels and programmatic objectives. This profile was reviewed with managers and staff and is included as an Appendix to this report.
- The project team also compared organizational structure, staffing levels, as well as certain operational and service delivery indices against several police departments in New Jersey. This step, too, served as a way to identify issues in this study and has been provided as an Appendix.
- The project team also reviewed initial findings and issues with the management of the Police Department and a Township appointed project steering committee comprised of staff, representatives from both bargaining units and a representative from the Lawrence Township Public Safety Committee.

In all instances, the measures of efficiency and effectiveness utilized by the project team in our analyses were selected and adjusted to reflect the unique operating and service conditions in the Township of Lawrence.

2. EXECUTIVE SUMMARY

The project team spent a great deal of time working with the Township and the Police Department in conducting this assignment. While projects such as this often focus on the opportunities for improvement, we believe that it is important to document the positive attributes found by the members of our project team as well. Examples of these are listed, below:

- The entire Lawrence Township Police Department is clearly committed to providing high levels of service to the community.
- Staffing is generally appropriate in all of the Department's organizational elements, with no findings of over-staffing by the project team.
- The Department is well organized to address community issues.
- The Township has focused on primary law enforcement functions: patrol, investigations, communications and records.
- Policies and procedures are detailed and complete.
- The internal affairs process is well focused on ensuring that the Department is self-policed in term of its own policies and procedures.
- The Department is following the New Jersey Attorney General's policies and procedures.

While the project team found a number of very positive aspects to the Police Department, we also found several opportunities to improve management, deployment of resources and / or service delivery in the community. The following are the key recommendations taken from the body of the report:

- Through attrition, the Township should eliminate either the Deputy Chief or the Captain positions from the organization chart. A new Sergeant position should be created to serve as Training Officer and to provide additional support to the Lieutenant – Internal Affairs. This will result in a net savings to the Township of \$44,000 per year in salaries and benefits once implemented.
- Continue to maintain the policies and procedures at their currently high levels. Furthermore, continue to review and update policies annually.
- The Department should focus on not only tracking but also analyzing key management information to ensure that issues do not develop.
- All areas of the Department should arrange for regular meetings to provide an opportunity to share information and to ensure coordination of activities. Investigative personnel should periodically attend patrol shift briefings to improve communication regarding investigative matters and enhance relationships between these components. Management meetings that are scheduled in advance should include an agenda and minutes should be taken to increase accountability.
- Maintain current staffing levels of Officers in the Patrol Division.
- Shift targeted staffing and personnel to redistribute proactive time. Maintain at least four personnel in the field on midnights, six personnel on day shift and eight personnel on evenings. This will require some changes in the scheduling of personnel.
- Make no changes to the current deployment. If funds become available, add one Sergeant to fill in rotation S8 (allowing the days and evenings to be covered with two scheduled Sergeants). If funds become available for an 11th Sergeant, fill rotation S9 which would enable the midnight shift to have consistent coverage by two scheduled Sergeants. The cost of the first position would be \$161,000 per year and the cost of filling two such positions would be approximately \$322,000 per year.
- Encourage a broader level of participation in the traffic enforcement program in the Police Department. Current levels of enforcement are appropriate given the numbers of injury accidents in the community.
- The Police Department should adopt a two-step process to enhancing the delivery of Patrol services. These should include Sergeants taking a more active role in overseeing and directing daily operations and assigning all Patrol personnel to a dedicated area of the Township on which to focus their primary proactive enforcement efforts. These mechanisms will enhance the management of Patrol and will also enhance the accountability of all personnel assigned to Patrol for the issues and problems in the community.

- The LTPD is staffed appropriately in the Detective Bureau.
- The Lieutenant in the Criminal Investigations Section should institute several formal management approaches as already described in policies. These steps should include the establishment of tighter deadlines, regular team meetings, and one-on-one reviews of caseload and approaches.
- The project team does not recommend any change in the current staffing levels in the Records Section of the Department.
- Add two (2) Communications Operator positions, to increase the total number to 11 authorized, at a salary cost of \$77,918 (current average of incumbents, not including Lead Dispatcher). With benefits calculated at 45.9%, this results in a total cost of \$113,682.
- Protocols concerning property/evidence audits should be modified to require that at least 10 percent of the high-risk items are checked no less than annually. Personnel assigned to the property/evidence component should place more emphasis on identifying property eligible for disposal – this is in line with the current efforts in the Department to purge older items.
- Begin capturing workload information in electronic format. The data captured should, at a minimum, include the elements listed above, however, the project team recommends that the Department also invest in an inexpensive software package that provides more robust management analytical capability. This software should cost no more than \$5,000.
- On attrition, convert the position of Information Technology Officer to a civilian position. Although there is no current position for Information Technology Technician in the Police Department currently, assuming the position would be paid at a rate 50% greater than the average Communications Operator, this would save the Department approximately \$30,000 to \$35,000 in salary costs, exclusive of the differential in benefits.

The total fiscal impact of these recommendations, if they are all implemented, is an increased annual cost of \$40,000. The following chapter addresses the management, organization and command staffing requirements of the Lawrence Township Police Department.

2. ANALYSIS OF MANAGEMENT, ORGANIZATION AND STAFFING

The first chapter in this report focuses on the organization and management of the Lawrence Township Police Department. The first section identifies the criteria that the project team utilizes for evaluating organizational structures.

1. KEY TO EVALUATING ANY ORGANIZATIONAL STRUCTURE IS THE NEED TO IDENTIFY CRITERIA FOR ASSESSMENT.

In order to evaluate the organizational structure of the Lawrence Township Police Department, the project team first had to identify the criteria by which the organizational structure would be judged. The paragraphs, that follow, describe those criteria as well as describe what is meant by each of them:

- **Accountability and responsibility is clearly identified:** The organizational structure must be consistent with the concept that clear lines of authority and decision making are essential for any organization to achieve excellence. Areas of responsibility are clearly delineated and points of accountability are readily identifiable.
- **Span of control or communication is optimal:** Effective organizations are structured so that lines of communication are identifiable and there where there are multiple reporting relationships, responsibility for communication and control are clearly identified and understood.
- **There are essential checks and balances in place where necessary:** As it relates to this project, checks and balances are necessary in the area of clinical performance review as opposed to operational performance review.
- **Structure is based on task requirements and work flow as opposed to specialized skills of individual members:** There is a tendency in some organizations to organize work patterns around the specific passions or skills of individual members. This results in high friction levels of most work processes and the relationships between group members and groups them.
- **Similar titled positions have similar responsibilities and levels of accountability:** The organization should be structured such that decision

making authority and the ability of decisions to impact the organization in a strategic way are all found at similar levels of the hierarchy.

- **Support functions are logically grouped and do not, through this grouping, create additional layers of oversight:** Organizational structures should group support functions together, separated from operations, only when the scale and scope of the operation requires it.

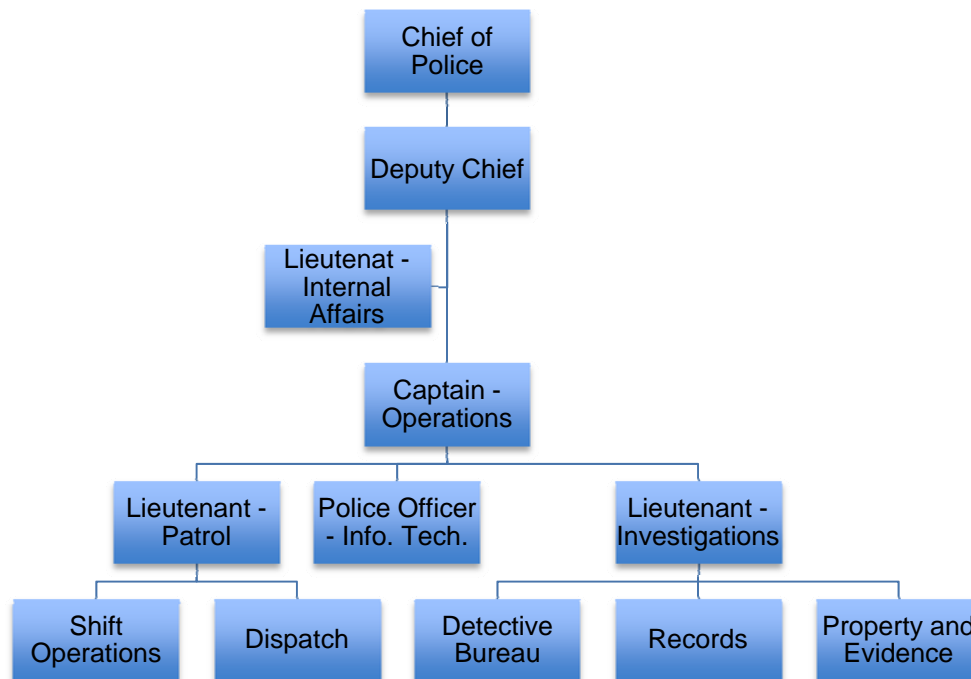
The section, that follows, provides our analysis of the current organizational structure and opportunities for improvement.

2. THE CURRENT ORGANIZATIONAL STRUCTURE LARGELY MEETS THE CRITERIA FOR AN EFFECTIVE ORGANIZATION.

The current organization of the Police Department is along fairly typical lines, as shown, on the following page. The exhibit, that follows, provides a graphical assessment of the current organizational structure. Note the “√” marks in a box indicate that the organizational unit meets that criteria described in the preceding section of the report.

Organizational Unit	Authority	Span of Control	Checks and Balances	Based on Work Flow	Similar Titles / Similar Duties	Support Integrated into Ops
Office of the Police Chief	√		√	√		√
Patrol Division	√	√	√	√	√	√
Investigations Division	√	√	√	√	√	√

Lawrence Township, NJ Police Department
Organizational Structure – Current as of 4/1/2011



The paragraphs that follow provide a summary of the project team’s findings and conclusions regarding the current organizational structure of the Police Department:

- The Department has a very hierarchical organization structure with the Chief supervising the Deputy Chief, who in turn supervises the Captain and a Lieutenant (who conducts Internal Affairs), who in turn supervises two operations Lieutenants and the IT Officer.
- The overall organizational structure of the Police Department focuses on the agency’s primary missions of answering and responding to calls for service (Patrol Division) and providing follow-up investigation and support services (Investigations Division). Each Division is commanded by a Lieutenant.
- There are no operational functions directly assigned within the Office of the Chief – an appropriate organizational approach in an agency of this size.
- Functions are logically grouped in the Department within the two operations divisions.
- The use of Lieutenant level officers to oversee single functions (such as internal affairs) with no subordinate staff is unusual in agencies of this size. This may

present an opportunity to focus on development and maintenance of accreditation standards.

The following section considers the organizational options available to the Police Department.

3. THE TOWNSHIP SHOULD ELIMINATE EITHER THE CAPTAIN OR THE DEPUTY CHIEF POSITIONS.

The project team has identified one issue within the current organizational structure – the number of personnel in command positions over the divisional command level. The Department currently has a Chief, Deputy Chief and Captain responsible for overseeing two operational Lieutenants, an IT Officer and an IA Lieutenant. This organizational approach has had the following impacts:

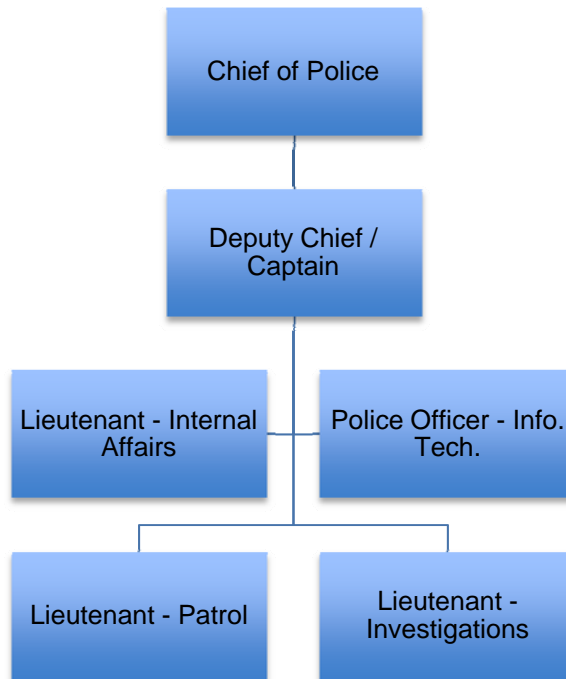
- The Chief is three levels removed from the operational commanders in Patrol and Investigations (with the Deputy Chief and Captain between the Chief and the two Lieutenants).
- The Chief essentially has a 1:1 reporting relationship to the Deputy Chief. The Deputy Chief position was created, in part, to clearly identify the next in command should the Chief be absent from Town.
- The Deputy Chief has a 1:2 reporting relationship with the Captain and the IA Lieutenant.
- The Captain has a 1:3 reporting relationship with the two operations Lieutenants and the IT Officer. In addition, the Captain is the Training Officer for the department.

The Township has three alternatives with which to resolve these organizational issues:

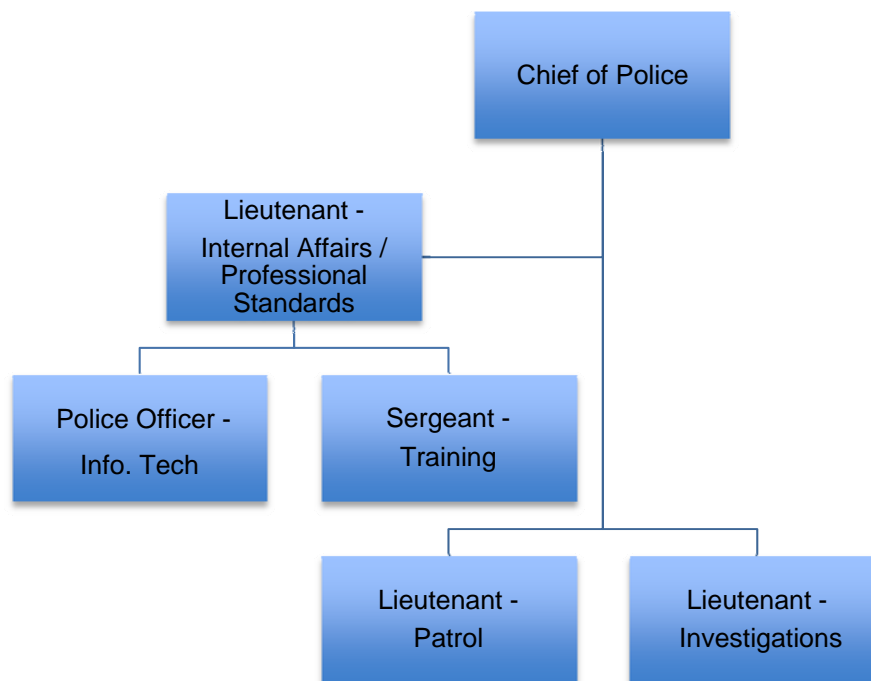
- Maintain the current organizational structure.
- Eliminate either the Deputy Chief or Captain position with the organization being reconfigured under a single operations commander.
- Eliminate both the Captain and the Deputy Chief, with all three Lieutenants reporting directly to the Chief.

The organization charts, that follow, show the two alternatives, with the status quo shown earlier in this chapter:

**Lawrence Township, NJ Police Department
Organizational Structure – Alternative One
Elimination of Either Deputy Chief / Captain**



**Lawrence Township, NJ Police Department
 Organizational Structure – Alternative Two
 Elimination of Both Deputy Chief and Captain**



The project team conducted a comparative survey examining command and other staffing, as well as other issues. The table, below, shows the results of the survey as it relates to command staff positions:

Municipality	Ewing	Lawrence	South Brunswick	West Windsor
Chief	1	1	1	1
Deputy Chief	0	1	1	0
Assistant Chief	0	0	0	0
Captain	0	1	2	0
Lieutenant	5	3	5	4
Sergeant	11	10	16	7
Total Staff	87	78	95	58
Total Staff: Command	14.5	16.0	10.6	11.6
Total Staff: Supervisors	5.1	4.1	3.8	4.8

Note that the Township of Lawrence is in the middle in terms of the ratio of command staff, Chief to Lieutenant, to total staff and supervisory staff, Chief to Sergeant, to total staff with ratios of 13.0:1 and 4.1:1 respectively. The paragraphs, that follow, provide a summary of the findings from this table:

- Lawrence Police Department is currently in the middle of both the command staff to total staff and supervisor (which includes command staff) to total staff ratios with 13.0:1 and 4.6:1 respectively.
- Neither Ewing nor West Windsor (the first being larger and second being smaller than Lawrence’s Police Department) have either any command staff above the rank of Lieutenant except the Chief.
- The South Brunswick Police Department has both a Deputy Chief (1) and Captains (2) but is also almost 20 personnel larger than the Lawrence Police Department.
- By comparison, a best practices agency the project team has worked with has a ratio of 21:1 managers (Chief, Deputy Chiefs, Captains and Lieutenants) to total staff.

The table, below, summarizes the benefits and challenges resulting from each of the three alternatives:

Alternative	Benefits	Challenges
Maintain Status Quo	<ul style="list-style-type: none"> • Provides for extensive management capacity for a range of assignments. • Deputy Chief position provides for clear ‘number two’ in the absence of the Chief. • Chief is able to focus on external issues (community, Council, etc.) while Deputy Chief and Captain focus on internal issues and operations. 	<ul style="list-style-type: none"> • Command staffing is larger than most similar agencies in project team’s experience. • Comparative survey also indicates that communities of similar size do not have the size of command staff currently assigned in the LTPD. • Fiscal impact of the command staff. • The Chief is separated by two layers (Deputy Chief and Captain) from operational commanders (Patrol and Investigations Lieutenants).

Alternative	Benefits	Challenges
Eliminate one Position (Deputy Chief or Captain)	<ul style="list-style-type: none"> • Reduction in fiscal impact of \$189,000 to \$210,000 from the elimination of one or the other position. • Elimination of one layer brings the Chief closer to operational managers and decisions. • Maintenance of a clear 'number two' position in the case of the Chief's absence. 	<ul style="list-style-type: none"> • Reduction in command staff will result in some reduction in management capacity. • Workload will shift to the two Lieutenants in operations to take on more administrative tasks. • Would increase ratio of managers to total staff from 13.0:1 to 15.4:1 (making it the highest among comparative communities). Supervisory ratio would increase from 4.6:1 to 4.8:1 – a nominal increase.
Eliminate both Deputy Chief and Captain Position	<ul style="list-style-type: none"> • Reduction in fiscal impact of \$399,000 from the elimination of two command staff positions. • Elimination of two layers of middle management. • Places the Chief in direct oversight of operational commanders. 	<ul style="list-style-type: none"> • Reduction in command staff will result in some reduction in management capacity. • Workload will shift to the two Lieutenants in operations to take on more administrative tasks. • Would require the creation of a 'Training Officer' position (at the rank of Sergeant). This would have a fiscal impact of \$161,000 in salary and benefits, for a net reduction in cost of \$238,000. • Would increase ratio of managers to total staff from 13.0:1 to 15.4:1 (making it the highest among comparative communities). Supervisory ratio would increase from 4.6:1 to 4.8:1 – a nominal increase. • The current staffing allows for better coverage of the leave granted to senior staff.

The project team has shown that the Lawrence Police Department command staff is larger than some comparative agencies. In addition, the following key points should be recalled:

- The Chief is separated from the line operations commanders by two layers of management (the Deputy Chief and Captain) in the current organizational structure.

- The operations Lieutenants in Patrol and Investigations have Sergeants and other unit supervisors available to assist in supervising daily operations. Both incumbents are graduates of the FBI National Academy for law enforcement management and leadership.
- There are significant financial savings that could accrue to the Township if one or both positions were eliminated through attrition or other approaches.
- Elimination of these two positions would require the Township to authorize a position to take over responsibilities as a Training Officer. The project team would recommend that this be at the rank of Sergeant, and that the position report to the Internal Affairs / Professional Standards Lieutenant.

The table, below, provides a per-position total salary and benefit cost for the positions discussed in this section:

Position	Salary	Benefits @ 40%	Total Cost
Deputy Chief	\$150,000	\$60,000	\$210,000
Captain	\$146,500	\$58,600	\$205,100
Sergeant	\$115,000	\$46,000	\$161,000

This table simply shows the cost of a single position in each classification that has been discussed in this section.

Recommendation: Through attrition, the Township should eliminate either the Deputy Chief or the Captain positions from the organization chart. A new Sergeant position should be created to serve as Training Officer and to provide additional support to the Lieutenant – Internal Affairs. This will result in a net savings to the Township of \$44,000 per year in salaries and benefits once implemented.

4. MANAGEMENT SYSTEMS IN THE POLICE DEPARTMENT SHOULD BE IMPROVED.

This section focuses on the critical management systems and infrastructure in place to support the daily operations of the Lawrence Township Police Department. These management systems should serve to ensure that the Department is operated in a manner designed to hold managers and staff accountable for their roles in the

organization and to ensure that personnel are managed in a fair and consistent manner.

Key management systems that must be in place in an effectively managed police Department include the following:

- Documented and up to date policies and procedures which are accessible to all personnel. This should include a process by which policies and procedures are reviewed and updated regularly.
- Regular executive management and supervisory meetings to ensure effective internal communications and accountability of senior personnel.
- Utilization of management reporting systems data for decision making and for assessing the impacts of various programs and other issues.
- Staff inspections are conducted of all major operational components on a regular basis to ensure daily operating practices conform to agency policies and procedures. This system should allow for inspections of all organizational components no less than every three years.
- A system for tracking administrative investigations and all citizen complaints against Department personnel. This system should insure that investigations are conducted in a timely manner with disposition information used to identify training deficiencies, to develop training curricula, and for policy development.
- A system for communicating timely information to the public and media concerning events affecting the lives of citizens in the community. The system should include clear direction regarding what information should be released and by whom to ensure accuracy and compliance with statutory requirements.

The following sections in this chapter address these managerial issues and provide recommendations for any enhancements.

(1) Key Management Systems Are in Place; However, Management Team Meetings Can Be Made More Effective.

This section examines a number of key management systems found within the LTPD. The first section addresses policies and procedures currently utilized by the Department.

(1.1) The LTPD Has a Comprehensive Standard Operating Procedures Manual Available in Both Electronic and Hard Copy Formats Covering Critical Aspects of Department Operations and Management.

The Matrix Consulting Group reviewed the current policies and procedures of the LTPD that establish Department policy and provide uniform guidelines for day to day operations. Members of the Department are held accountable to adhere to these directives. The points which follow, describe the team's findings from that review:

- High risk policies are generally promulgated by the Attorney General's Office in New Jersey. These provide a uniform and consistent way of doing business.
- The Department manual is well organized and contains comprehensive general orders addressing many aspects of the Department's operations. This manual contains policies and standard operating procedures that are easy to read and understand. The directives include policy statements, guidelines, and step by step procedures where appropriate.
- The policies and procedures are formulated with input from staff, reviewed regularly, and updated as needed.
- Numerous policies include time sensitive action requirements to ensure timely data collection and analysis, reviews, and inspections.
- Key policies and procedures are in place, including those dealing with the following high liability issues:
 - Incident Reporting
 - Use of Force
 - Vehicular Pursuit, Emergency Vehicle Driving
 - Misconduct Investigations, Disciplinary Procedures, Internal Affairs Investigations, and Personnel Early Warning System
 - Bias Based Profiling
- The directives are intended to meet the requirement of both New Jersey and, in many cases, national accreditation standards, and sound police practices.

The Matrix Consulting Group found the directives, which govern the overall operations of the LTPD, are comprehensive and provide uniform guidance for day to day Departmental operations. The directives are reviewed regularly and kept current. All of the directives are available to Department personnel via intranet, computer disk, and in hard copy manuals placed at strategic locations.

Recommendation: Continue to maintain the policies and procedures at their currently high levels. Furthermore, continue to review and update policies annually.

(1.2) The LTPD Utilizes Numerous Reporting Systems for Decision Making and for Assessing the Impacts of High Liability Activities and Other Issues.

The project team reviewed Department directives governing high liability activities, responsibilities outlined therein, and subsequent summaries and analysis reports. The Department strictly adheres to policies which require thorough documentation, review, and analysis of these types of activities which include:

- Vehicle Pursuits
- Use of Force Incidents
- Grievance Analysis
- Personnel Administrative Inquiries and Investigations
- Early Warning System

The project team determined that the Department has appropriate systems in place to ensure that this information is collected but that it may not be analyzed in a timely manner. Most often, the responsibility for preparing these reports falls on the Internal Affairs Lieutenant and Deputy Chief.

Recommendation: The Department should focus on not only tracking but also analyzing key management information to ensure that issues do not develop.

(2) LTPD Executive and Management Staff Meetings Are Not as Effective as They Should Be.

The project team examined the processes for meetings used by LTPD management teams to meet among themselves; and with other members of the larger command and supervisory staff. The project team's findings are summarized below:

- These findings are based on the work of the project team during the spring of 2011. Several of these issues have been addressed by current staff.
- Executive management meetings are held every Monday with the Chief, Deputy Chief, Captain and Lieutenants in attendance. Attendees report on their own areas of responsibility and keep their own notes as necessary. Agendas are not prepared in advance and formal minutes are not kept. No formal accountability systems are in place to record responsibilities or monitor progress.
- There are few formal meetings between the Chief and the operational commanders.
- None of the Divisions have regular command staff meetings. Sub-unit meetings are held in unit work areas, such as patrol shift briefings, but regular meetings have not been consistently held among other organization components such as Investigations.

The Matrix Consulting Group found that the Department holds infrequent meetings among organizational components. When executive and command staff meetings are held, there are no provisions for agendas or minutes. Agendas should be used for all formal meetings. Minutes should be kept for all formal meetings and should document assignments for the purpose of accountability as well as key discussions and management decisions. The minutes should not include personnel matters or other issues that relate to sensitive issues.

Recommendation: All areas of the Department should arrange for regular meetings to provide an opportunity to share information and to ensure coordination of activities. Investigative personnel should periodically attend patrol shift briefings to improve communication regarding investigative matters and enhance relationships between these components. Management meetings

that are scheduled in advance should include an agenda and minutes should be taken to increase accountability.

(3) LTPD Has an Excellent System for Handling Administrative Investigations and Citizen Complaints Against Department Personnel.

The project team examined the processes in place for the receipt, investigation, and disposition of complaints of misconduct by Department personnel. The project team's findings are summarized below:

- The LTPD has a system in place that enables command staff to track all complaints against personnel.
- The system does not include an early warning component to help identify cumulative events that trigger an alert on employees. The early warning events should include citizen complaints, work performance infractions, vehicle pursuits, and use of force incidents. The Internal Affairs Lieutenant would be responsible for tracking and monitoring this data base.
- The LTPD accepts complaints against Department personnel regardless of the source, including complaints made in person, on the phone or in writing. Anonymous complaints are handled at the discretion of the Chief of Police.
- The process for filing a complaint is posted in the Department lobby.
- Internal investigations and internal inquiries are conducted in conformance with New Jersey statutes and are normally concluded in 45 days. Exceptions may be granted by the Chief of Police under extenuating circumstances. The majority of administrative inquiries and internal investigations are concluded within 30 days.

The public does not have access to the internal affairs process and the results of investigations. Complainants are notified of the disposition of their complaint by certified mail. Basic statistical summaries are made available to the public and agency employees.

- Whenever the results of administrative inquiries or internal investigations reveal a training need, it is addressed immediately with the individual. Policy failure issues are addressed immediately by the Chief of Police. Information derived from internal investigations and administrative inquiries are used to develop guidance for both training and policy development. This is accomplished by the

Internal Affairs Lieutenant who will work with the Deputy Chief and Captain to determine broader training needs.

- Departmentally initiated administrative cases clearly exceed those from the public, which is a strong indicator the Department is self-policing.
- Attorney General Guidelines for Internal Affairs are being followed by the Police Department.
- The Department has a progressive discipline policy.
- There is no formal early warning system in place – but they do review use of force reports and vehicle accidents.

The Matrix Consulting Group found that the LTPD operates its internal affairs matters in a professional manner with due regard for keeping the public informed of such matters. It is clear that the Department is self-policing and does not hesitate to initiate investigations. All investigations are initiated and concluded in a timely manner, regardless of the source of the complaint.

3. ANALYSIS OF PATROL STAFFING

This chapter focuses on the staffing and management of Patrol operations. The project team has conducted a detailed analysis of patrol staffing and required levels of supervision.

1. OVERVIEW OF THE MATRIX CONSULTING GROUP'S PATROL STAFFING ANALYTICAL MODEL.

While it would be useful to identify a “golden rule” of law enforcement staffing needs, the utilization of comparative measures does not provide for an appropriate evaluation of field staffing needs, nor should it be used as the primary basis for a local government to measure the effectiveness of law enforcement services. The Matrix Consulting Group does not use a “per capita” or “per 1,000” ratio as an analytical tool in assessing field staffing needs, for the following reasons:

- Ratios do not consider the seriousness of the workload levels of the jurisdictions being compared. For example, the crime rate should be considered in any comparative analysis of workloads, specifically, the number of serious crimes in a community (e.g. homicide, rape, robbery, aggravated assault, burglary, motor vehicle theft, and larceny).
- Ratios do not consider a jurisdiction's approach to alternative service delivery or “differential law enforcement response.” The use of civilian personnel, or lack thereof, to handle community-generated calls for service and other workloads has great potential to impact the staffing levels of sworn personnel. The level / amount of civilians (i.e. community service officers, telephone reporting, online services, etc.) can be used to maximize the efficiency and effectiveness of sworn personnel handling higher priority calls in a community. These resources are not calculated in staffing ratios.
- Ratios do not consider the differences in service levels selected, or capabilities, which a jurisdiction may have for their law enforcement services (e.g. community-oriented or problem-solving oriented, a reactive versus proactive philosophy, the utilization of Township-wide resources in solving problems, etc.). All of which add to the inability to compare the necessary number of field patrol personnel.

- Ratios do not consider other differences which have an impact on regular patrol staffing needs such as existence of special enforcement / support units as well as operational approaches (e.g. the use of field citations versus arrests, manual versus automated and field reporting systems, and whether patrol deputies are expected to follow-up on certain investigations).
- Ratios do not take into account topographical differences (i.e. square miles of a service area) and other response impediments, which can impact patrol staffing needs.

For these reasons, the project team does not use “per capita” or “per 1,000 residents” ratios as a way for our clients to measure effectiveness in providing law enforcement services, or as a determinant in developing staffing needs. The project team’s analysis of the LTPD considered the need for a balance of community-generated workloads and the availability of proactive time to generate activities. The following subsections describe this analytical process.

(1) The Analysis of Field Patrol Resource Requirements Should Be Based on Actual Workloads Handled and Appropriate Targets of Proactivity.

The Matrix Consulting Group utilizes a method in which the number of field personnel required is based on an analysis of the unique workloads and service level requirements of a community. In order to evaluate these resources and staffing issues, the project team conducted a data collection and analytical effort focusing on the following:

- Determining community generated workloads in the detail necessary to understand the work volume and the time required to handle it.
- Targeting an amount of time beyond community generated, or “reactive” workload, which can be utilized to be proactive in a directed kind of way (i.e. special enforcement of high-crime areas, etc.).
- The field resources used to handle calls for service and proactive workloads based on officer availability levels (after taking into account personnel time for vacation, sick, etc.).

- Deployment and scheduling utilized by the Lawrence Township Police Department.

Field law enforcement services represent one of the areas of law enforcement operations in which staffing and service levels can be clearly quantified. Several factors determine the level of patrol staffing required in a community, including:

- The community generated call for service demand by time of day, and day of week.
- How officers are utilized and deployed. The Police Department has 39 Police Officers assigned (including one K9 Officer) who are responsible for responding to community-generated calls for service in the four patrol zones. Personnel work the following shift schedules:
 - Day: 0630-1500
 - Evening: 1430-2300
 - Midnight: 2230-0700
- How calls for service are managed by a law enforcement agency. Many departments throughout the United States manage calls for service in a number of ways. What these methods of handling calls for service have in common is that they free up the time of trained, professional officers from handling lower priority calls (i.e. routine calls) so that more of their available time can be spent on calls requiring a higher level of expertise and training. The LTPD does not have any such positions.
- The level of service desired by communities varies; for example, the amount of “proactive” time, or “uncommitted” time a community desires. This is another factor impacting required patrol staffing levels. This involves time not spent handling community generated calls for service and “proactive” time for which an officer is available for preventive patrol, self-initiated activity (i.e. observations, including suspicious pedestrians or vehicles, etc.), special or directive patrol, and other approaches for addressing crime problems, quality of life issues, etc.

The project team employed a model based on these decision points in evaluating officer field staffing for the LTPD, in terms of workload, service levels, and overall operations. The following section identifies and discusses the various

characteristics and elements of the field staffing model, and how proactive time is calculated.

(2) Workload and Data Elements Utilized in Patrol Staffing Model.

Officers dedicate time to responding and handling community generated calls for service, as well as related activities, including reports (particularly the more serious reports not completed during the initial handling of the call for service), arrests / bookings, back-up assistance, etc., as well as the associated times for these elements, as identified in the following table. These elements are all utilized to calculate total field commitments (i.e. proactive time) in our model, as follows:

(2.1) Patrol Workloads.

The first critical data element required to analyze field resources is to document the types and amount of work handled by patrol officers. The first table, below, shows the distribution of citizen generated calls for service in 2010. The calls for service shown in the table exclude officer-initiated activity (which results from the proactive time which is available).

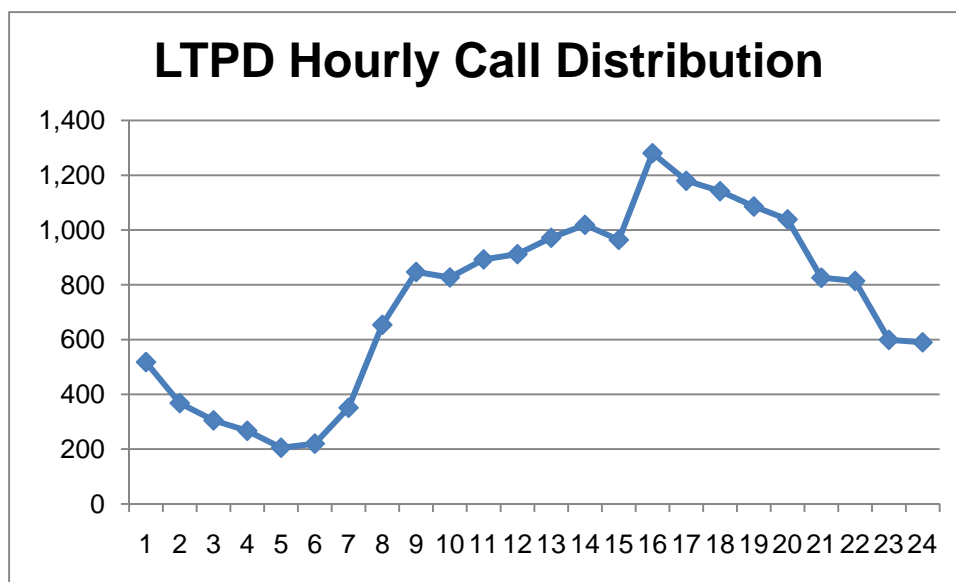
LTPD Community-Generated CFS – 2010

Hour	Sun	Mon	Tue	Wed	Thur	Fri	Sat	Total
0000	108	64	57	71	60	72	86	518
0100	77	38	44	49	38	51	71	368
0200	48	37	36	41	29	41	73	305
0300	41	28	35	34	34	43	52	267
0400	30	28	22	30	30	41	24	205
0500	33	35	22	36	26	29	39	220
0600	31	64	43	56	53	55	49	351
0700	48	112	109	116	86	113	70	654
0800	79	129	138	131	122	139	109	847
0900	96	138	131	130	125	109	98	827
1000	108	152	137	115	134	130	117	893
1100	117	131	110	153	151	123	127	912
1200	113	156	132	151	142	127	151	972
1300	110	163	125	156	159	148	158	1,019
1400	131	149	108	131	137	184	124	964
1500	150	201	174	194	157	203	202	1,281

TOWNSHIP OF LAWRENCE, NEW JERSEY
Police Department Staffing Study

Hour	Sun	Mon	Tue	Wed	Thur	Fri	Sat	Total
1600	144	185	168	171	166	173	173	1,180
1700	131	157	177	172	193	171	141	1,142
1800	114	141	150	173	167	185	156	1,086
1900	117	138	153	158	146	184	143	1,039
2000	106	117	117	138	120	125	103	826
2100	108	110	112	103	107	143	131	814
2200	66	101	85	71	87	103	86	599
2300	77	63	74	85	78	112	101	590
Total	2,183	2,637	2,459	2,665	2,547	2,804	2,584	17,880
Pct.	12.2%	14.7%	13.8%	14.9%	14.2%	15.7%	14.5%	100.0%

The exhibit below provides a graphical depiction of the same information:



The section, which follows, provides a description of the project team’s models for patrol staffing and deployment.

(2.2) Handling Time.

A critical component of the Matrix Consulting Group’s patrol staffing model is the evaluation of total time spent by patrol personnel handling community-generated calls for service. The calculation, below, shows each time element of the average amount of time spent by patrol Officers responding to calls for service:

Time Component	How Determined
Handling Time	From the CAD system, the project team derived an average

	handling time of 41.6 minutes. This is comprised of 6.52 minutes of travel time and 35.12 minutes of on-scene time
Back-up Assist	Back-up time is included in the handling time calculation due to the way in which the CAD system tracks unit on scene time (discussed above). Since CAD does not track this easily, we assumed the top of the acceptable range of 1.6 units per the average call for service.
Report Writing Time	Assumed to be 45 minutes, on average, per report.
Arrests and Bookings	Assumed to be 60 minutes per arrest / booking.

All of these times impact the amount of time it takes for Officers to handle citizen generated calls for service, and therefore the amount of proactive time available to them on shift.

(2.3) Officer Availability.

The second important element impacting the number of personnel required in Patrol is the amount of time available for field personnel. The following table provides a summary of the utilization of leave by major classifications of personnel in the LTPD. This includes all leave categories including “limited duty.”

Classification	Number	Total Hours	Hours / Person	% Available of 2,080 or 1,947 Hours¹
Civilian	6.00	2,345.00	390.83	81.21%
Command	6.00	2,943.75	490.63	76.41%
Comm	8.00	3,499.25	437.41	77.53%
Detective	7.00	3,697.33	528.19	72.87%
Police Officer	43.00	23,605.75	548.97	71.80%
Sergeant	10.00	5,076.00	507.60	73.92%

Note that the range of availability is relatively tight for all positions with the following key points:

- The ‘Civilians’ (including records clerks) have the highest level of availability at 81.2%.

¹ The 2,080 hours applies to civilian and command staff personnel. The 1,947 hours applies to other personnel who work a 4/2 (or equivalent) schedule.

- The lowest level of availability is in the Police Officer classification, with 71.8% of shifts covered as scheduled.
- All other classifications are in the range of 72.9% (Detectives) to 77.5% (Communications).

These levels are either at or slightly lower than the project team's expectations based on past experience. The points, below, expand on several key issues identified in the table:

- The payroll system shows that Police Officers are available 1,398 hours after all leave categories have been accounted for. This is equivalent to 72% of the time. This includes the impact of long-term disability, family medical leave and other factors that take an officer out of the patrol schedule (vacation, sick leave, etc.).
- The project team made a number of additional assumptions based on observation and consultation with LTPD staff regarding the impacts of administrative responsibilities, court, training as well as time off factors associated with meals, etc. These further reduce an Officer's available time to handle Patrol workloads. These assumptions (except training time which is an actual figure) are described below:
 - **Meals and Breaks** were assumed to take a total of 45 minutes per shift actually worked (i.e. after regular days off, leave, training, meetings, and court time were accounted for) per officer. This assumption takes into consideration that field personnel need to be covered during these periods except in emergencies.
 - **Shift Briefing** was observed and is assumed to take 15 minutes per shift actually worked per officer.
 - **Vehicle and Equipment Preparation** was observed and is similarly assumed to take 15 minutes per shift worked per officer. This includes time during the shift to fuel vehicles in service.
 - **Training** time was based on in service training hours provided annually – 42 hours per sworn personnel.
 - **Court** is assumed to take 40 hours per year of on-duty time. This is in addition to overtime court time, not performed during on-duty hours.

The next section describes how the preceding workload elements and officer availability factors are utilized to evaluate patrol staffing and field deployment issues.

(3) The Project Team Recommends a Patrol Staffing Model That Is Based on the Department's Actual Experience and Policy Decisions.

This section provides a summary of the patrol staffing and field resource deployment model utilized by the Matrix Consulting Group.

Input / Calculation	Description
Committed Time	<ul style="list-style-type: none"> • This includes the following: <ul style="list-style-type: none"> - Primary unit time on-scene. - Any report writing time. - Any arrest processing time. - Any time dedicated to the call for service by non-primary units (for any of the reasons above or for any other reason not listed). - <u>Does not include</u> units that are cancelled before they arrive on-scene.
Reactive Time	<ul style="list-style-type: none"> • The product of the number of calls for service times the number of hours in the shift (or period being measured) times the Committed Time. • When expressed as a percentage, it is shown as the Reactive Time divided by the Net Duty Time Available.
Proactive Time	<ul style="list-style-type: none"> • The remainder of the Net Duty Time Available after all Reactive Time is accounted for.
Call for Service Workload	<ul style="list-style-type: none"> • The average number of calls for service (citizen generated only) that are handled within a given period of time. • Expressed in a per-hour basis in the spreadsheet.
Staff Available	<ul style="list-style-type: none"> • Determined using shift log and payroll records. • Shows the average number of Officers (does not count supervisors) available to handle call for service workload. • Removes Officers for the times they have to cover dispatcher positions by being the 'station officer.'
Shift Length	<ul style="list-style-type: none"> • The duration of the average shift worked in patrol. • Can be altered to reflect shorter-than-shift periods of time if such detail is desired in an analysis. • Need to be careful to link workload to the appropriate period of time if non-shift length analyses are conducted.
Gross Duty Time Available	<ul style="list-style-type: none"> • Determined by multiplying the number of staff available times the length of the shift (or whatever time period is being used).
Administrative Time Lost	<ul style="list-style-type: none"> • Includes: meals, shift briefing, vehicle / equipment preparation time, training, court, meetings (Department business only), etc.
Net Duty Time Available	<ul style="list-style-type: none"> • Takes into account the gross time less the time lost on shift (i.e. administrative time).

The model described above was utilized to evaluate patrol resources and utilization. The section, which follows, provides a summary of the results of the project team's analysis of the use of proactive time in field patrol in 2010.

4. ANALYSIS OF PROACTIVE TIME LEVELS INDICATES THAT WORKLOAD AND PERSONNEL ARE UNEVENLY DISTRIBUTED BY SHIFT AND PATROL AREA.

This section provides the project team's analysis of proactive time levels in each of the patrol districts.

(1) Overall Proactive Time Levels.

The project team developed an analysis of proactive time to assist in the evaluation of current patrol deployment. The concept of proactivity is very important in law enforcement – if field personnel are committed a large proportion of the time, they have little capability to impact the root causes of crime, to anticipate crime (when analysis shows there to be some predictability) or to work with citizens. Moreover, field personnel with little uncommitted time find it difficult to produce response times at community expected levels. Police departments that have developed a community policing program based on effective use of proactive time typically targeted at a 40% - 50% uncommitted time range. These departments, and research supporting these targets, have found that proactive time below 40% does not provide time in sufficient blocks to be useable; above the 50% level it is typically not affordable and is inefficient. The table, below, provides a brief discussion of the two proactive time targets utilized in our patrol-staffing model:

40% Proactive Time	50% Proactive Time
<ul style="list-style-type: none"> • Below this level, proactive time begins to come in blocks that are too small to be useful for “community policing”. • At this level, police should be able to engage in a wide range of preventive activities, including: directed patrol, responding to non-criminal quality of life complaints, engaging in traffic enforcement and other activities. • Ability to engage in community meetings and other time consuming efforts (which take Officers out of their patrol areas or make them unavailable for call) is more constrained at these levels of uncommitted time. • As with any effort, this requires active involvement of supervisors. More of the Officers’ time is dictated by the necessity of handling calls for service than in higher target situations. 	<ul style="list-style-type: none"> • Above this level, proactive time comes in blocks that are difficult to utilize in routine shift circumstances. • At this level, Police Officers should be able to engage in the full range of activities described under the 40% target. • In addition, the Department should be able to free Officers from shift work to attend community meetings, etc., with little impact on reactive capabilities. • Investment in this level of proactive law enforcement requires a strong commitment to actively manage the use of this time, for supervisors to be held accountable for their Officers’ utilization, etc.

The project team views 40% to be a minimum average proactive time target for an agency involved in a community policing program; 50% is targeted by agencies that have developed a comprehensive program of officer / community involvement. Several key factors should be kept in mind when reviewing the analysis of proactive time:

- Patrol availability was calculated using the net availability and other information provided in the preceding sections.
- Actual deployment of patrol personnel in the field.
- Call for service workloads, distributed on district, time of day and hourly basis.

The table, that follows, shows the breakdown of the proactive time calculation by total and by shift.

- Aggregate proactive time is in the range of 40% to 50% at 49% in total.
- Proactive time ranges from a low of 26% (for the evening shift) to a high of 75% for the overnight shift.

**Lawrence Township Police Department
 Calculation of Proactive Time**

	SHIFT			Average
	2230 - 0700	0630 - 1500	1430 - 2300	
<u>Deployment</u>				
Actual On-Duty Staffing (Officers -- no supervisors *)	6.1	6.6	5.9	6.2
Length of Shift (hours)	8.0	8.0	8.0	8.0
Total Gross Duty Time Available (mins.)	2,928.0	3,168.0	2,832.0	2,976.0
Less Breaks / Meals (60 mins. / Officer)	457.5	495.0	442.5	465.0
Net Duty Time Available	2,470.5	2,673.0	2,389.5	2,511.0
<u>Reactive Workload Requirements</u>				
Average Number of Calls for Service per Hour	1.0	2.4	2.7	2.0
Handling Time (Travel + On-scene) (Actual mins.)	41.6	41.6	41.6	41.6
Direct Call Handling Time (mins.)	321.9	808.8	909.0	679.9
Back-Up Rate	0.6	0.6	0.6	0.6
75% of Primary Unit Time Committed	75%	75%	75%	75%
Total Back-Up Time Commitment	144.9	364.0	409.1	306.0
Number of Reports / Shift	2.3	5.8	6.5	5.7
Report Writing Time (Estimate in mins.)	45.0	45.0	45.0	45.0
Total Report Writing Time (mins.)	104.1	261.4	293.8	257.2
Number of Arrests / Shift	0.9	2.3	2.6	0.7
Arrest Processing Time (Estimate in mins.)	60.0	60.0	60.0	60.0
Total Arrest Processing Time (mins.)	55.6	139.8	157.1	39.2
Total Committed or Reactive Time	626.5	1,574.0	1,769.0	1,282.3
Percentage of Time Committed to Reactive Workload	25%	59%	74%	51%
Total Proactive Time Available After Reactive Work	75%	41%	26%	49%

**Lawrence Township Police Department
 Calculation of Proactive Time
 Taking Staffing of Dispatch Into Account**

	SHIFT			Average
	2230 - 0700	0630 - 1500	1430 - 2300	
Deployment				
Actual On-Duty Staffing (Officers -- no supervisors *)	5.6	6.3	5.6	5.8
Length of Shift (hours)	8.0	8.0	8.0	8.0
Total Gross Duty Time Available (mins.)	2,448.0	3,168.0	3,312.0	2,976.0
Less Breaks / Meals (60 mins. / Officer)	252.0	284.0	252.0	262.7
Net Duty Time Available	2,065.5	2,673.0	2,794.5	2,511.0
Reactive Workload Requirements				
Average Number of Calls for Service per Hour	1.0	2.4	2.7	2.0
Handling Time (Travel + On-scene) (Actual mins.)	41.6	41.6	41.6	41.6
Direct Call Handling Time (mins.)	321.9	808.8	909.0	679.9
Back-Up Rate	0.6	0.6	0.6	0.6
75% of Primary Unit Time Committed	75%	75%	75%	75%
Total Back-Up Time Commitment	144.9	364.0	409.1	306.0
Number of Reports / Shift	2.3	5.8	6.5	4.9
Report Writing Time (Estimate in mins.)	45.0	45.0	45.0	45.0
Total Report Writing Time (mins.)	104.1	261.4	293.8	219.8
Number of Arrests / Shift	0.9	2.3	2.6	0.7
Arrest Processing Time (Estimate in mins.)	60.0	60.0	60.0	60.0
Total Arrest Processing Time (mins.)	55.6	139.8	157.1	39.2
Total Committed or Reactive Time	626.5	1,574.0	1,769.0	1,244.9
Percentage of Time Committed to Reactive Workload	30%	59%	63%	50%
Total Proactive Time Available After Reactive Work	70%	41%	37%	50%

- Note that these levels of proactive time are actually worse when the impact of covering dispatch (i.e., the 'station officer') are taken into account and the average on duty staffing is adjusted accordingly. This is shown in the second exhibit (i.e., the one on the preceding page).
- The Matrix Consulting Group examined a sample of shift rosters for both Patrol and Communications, and determined, by counting the number of dispatchers on duty, by shift, on the first 7 days of each month of 2010. This resulted in the following:
 - Of the 107 days in the sample, Day shift had fewer than two (2) civilian dispatchers 31 days (29.0% of the time),
 - The evening shift had fewer than two (2) civilian dispatchers on 34 days (31.8%),
 - The midnight shift had fewer than two (2) civilian dispatchers on duty 55 days (51.4%).
- Note that the impact of covering dispatch roughly 30% of the time on day and evening shift, and doing so about half the time on overnights is reflected with a reduction of approximately 2% on the total proactive time. However, it is more significant in the evening shift when it reduces proactive time to 22% - thereby eliminating the possibility of conducting any kind of community policing program.

The next section examines the total staffing required in Patrol in the Lawrence Township Police Department.

5. THE PROJECT TEAM DETERMINED STAFFING NEEDS IN THE TOWNSHIP BASED ON WORKLOADS AND RECOMMENDED PROACTIVE TIME TARGETS.

This section provides our calculation of the total patrol officer staffing needs in Lawrence Township. These figures will be used as a baseline to evaluate redeployment opportunities among the Districts or staff allocations. The total staffing requirements are shown based on the number of calls for service in 2010. These calculations also incorporate officer availability as well as additional personnel needed to cover turnover (i.e. extra time needed to cover staff losses and time needed to recruit, hire, and train new officers).

The staffing calculations are shown in the exhibit, below:

	<u>Workload Factor</u>
<u>1. COMMUNITY GENERATED WORKLOADS</u>	
• Calls for service (actual)	17,880.00
• Handling time/CFS in hrs. (actual)	0.69
• Total CFS handling time in hrs.	12,408.72
• Officer back-up rate (estimated)	0.60
• Total back-up time (back-up @ 75% of first unit time on scene) in hrs.	5,583.92
• Number of bookings (actual)	2,144.00
• Booking time (est. @ 60 mins./booking) in hrs.	2,144.00
• Number of reports (actual)	5,348.00
• Report writing time (est. @ 45 min. avg.) in hrs.	4,011.00
TOTAL TIME REQUIRED TO HANDLE COMMUNITY GENERATED WORKLOADS (HRS.)	<u>24,147.64</u>
<u>2. TIME FOR PREVENTIVE PATROL AND SELF INITIATED ACTIVITIES (IN HOURS)</u>	
• @ 40% of Available Time	16,098.43
• @ 50% of Available Time	<u>24,147.64</u>
<u>3. TOTAL TIME REQUIRED TO HANDLE BOTH REACTIVE AND PROACTIVE ACTIVITIES (IN HRS.)</u>	
• @ 40% Proactive Time	40,246.07
• @ 50% Proactive Time	<u>48,295.29</u>
<u>4. OFFICER AVAILABILITY</u>	
Est. Availability	
• Net shift hours worked – 1,398 hours less time for meals, breaks, court, training, etc.	<u>1,137.59</u>
<u>5. POLICE OFFICERS REQUIRED TO HANDLE WORKLOADS</u>	
• @ 40% of Available Time	35.38
• @ 50% Proactive Time	<u>42.45</u>
<u>6. POLICE OFFICERS REQUIRED GIVEN ESTIMATED INCIDENCE OF INJURY</u>	
• @ 40% of Available Time	37.15
• @ 50% Proactive Time	<u>44.58</u>
<u>7. POLICE OFFICERS REQUIRED GIVEN "NORMAL" TURNOVER AND TIME NEEDED TO ACADEMY AND FIELD TRAIN</u>	
• @ 40% of Available Time	40.86
• @ 50% Proactive Time	<u>49.03</u>

The following points highlight the information presented above:

- The project team calculated the staffing required at both 40% proactive time and at a 50% proactive time target. Wherever possible, actual data from the LTPD were utilized. Where data were not specifically available, the project team conferred with the Department and also utilized our own experience to develop estimates of the time it would take to complete various tasks, provide back-up, etc.
- The inputs in the model have been detailed in preceding sections of this chapter.
- The result of the model is that the Police Department requires between 37 and 44 Police Officers to handle workload, cover Officer availability and to cover the possibility of injury leave.
- To cover turnover as well, the project team estimates that the Township would require between 41 and 49 personnel. However, the Township can make the decision (as it has) to cover vacancies with overtime from existing personnel.

Overall, the staffing analysis indicates that the Police Department is appropriately staffed in Patrol with 39 existing Police Officer positions. However, our analysis has shown that there may be an opportunity to improve the level and distribution of personnel to smooth out proactive time – with a focus on increasing proactive time in the evening shift where it is most beneficial to the community. The proactive time analysis showing the impact of this change is shown on the following page.

Based on this analysis, the project team makes the following findings and recommendations:

- Reduce targeted staffing on the midnight shift to four (4) personnel.
- Maintain a targeted staffing on the day shift of six (6) personnel.
- Increase targeted staffing on the evening shift to eight (8) personnel.
- Continue to utilize the proactive time as a source for time to manage prisoner watch and prisoner escort.

**Lawrence Township Police Department
 Calculation of Proactive Time
 Taking Staffing of Dispatch Into Account
 With Changes to Targeted Staffing Levels to
 Improve the Distribution of Proactive Time**

	SHIFT			Average
	2230 - 0700	0630 - 1500	1430 - 2300	
Deployment				
Actual On-Duty Staffing (Officers -- no supervisors *) AFTER STAFFING DISPATCH	3.6	6.3	7.6	5.8
Length of Shift (hours)	8.0	8.0	8.0	8.0
Total Gross Duty Time Available (mins.)	1,721.3	3,028.8	3,639.4	2,796.5
Less Breaks / Meals (60 mins. / Officer)	161.4	284.0	341.2	262.2
Net Duty Time Available	1,559.9	2,744.9	3,298.2	2,534.3
Reactive Workload Requirements				
Average Number of Calls for Service per Hour	1.0	2.4	2.7	2.0
Handling Time (Travel + On-scene) (Actual mins.)	41.6	41.6	41.6	41.6
Direct Call Handling Time (mins.)	321.9	808.8	909.0	679.9
Back-Up Rate	0.6	0.6	0.6	0.6
75% of Primary Unit Time Committed	75%	75%	75%	75%
Total Back-Up Time Commitment	144.9	364.0	409.1	306.0
Number of Reports / Shift	2.3	5.8	6.5	5.7
Report Writing Time (Estimate in mins.)	45.0	45.0	45.0	45.0
Total Report Writing Time (mins.)	104.1	261.4	293.8	257.2
Number of Arrests / Shift	0.9	2.3	2.6	0.7
Arrest Processing Time (Estimate in mins.)	60.0	60.0	60.0	60.0
Total Arrest Processing Time (mins.)	55.6	139.8	157.1	39.2
Total Committed or Reactive Time	626.5	1,574.0	1,769.0	1,282.3
Percentage of Time Committed to Reactive Workload	40%	57%	54%	51%
Total Proactive Time Available After Reactive Work	60%	43%	46%	49%

Reallocating personnel is the most fiscally responsible approach to improving the proactive time on the evening shift. To do so with additional personnel would represent a significant cost increase. In order to increase the targeted staffing in the evening shift by two personnel, it would require the following:

Change in Targeted Staffing	2
Hours to Cover (8 hour shift 365 days)	5840
Net Availability / Officer (in hours)	1398
Personnel Required	4
Salary / Position	\$99,273
Benefit Rate (Average)	46.64%
Cost / Position	\$145,574
Cost / All Positions	\$582,296

Note that the cost of adding these four personnel would be more than \$580,000 annually (with first year costs significantly higher to account for training, uniforms, etc.).

Recommendation: Maintain current staffing levels in Patrol.

Recommendation: Shift targeted staffing and personnel to redistribute proactive time. Maintain at least four personnel in the field on midnights, six personnel on day shift and eight personnel on evenings. This will require some changes in the scheduling of personnel.

6. THE NUMBER OF PATROL SUPERVISORS IS APPROPRIATE FOR CURRENT SHIFT AND OPERATIONS. A MODIFICATION TO THEIR DEPLOYMENT WOULD SMOOTH OUT SUPERVISION LEVELS.

Sergeants work a 4 and 2 rotation with three shifts per day. Sergeants on Day/Evening shifts rotate days and evenings each 4-day rotation. Sergeants on midnight shift stay on midnights throughout the year. The following shows the total number of sergeant positions deployed in the Lawrence Township on a 12-day cycle (this does not show the rotation for Sergeants assigned to midnights):

Day	DE-1	DE-2	DE-3
1	2 Day	2 Evening	
2	2 Day	2 Evening	
3	2 Day		1 Evening
4	2 Day		1 Evening
5		2 Day	1 Evening
6		2 Day	1 Evening
7	2 Evening	2 Day	
8	2 Evening	2 Day	
9	2 Evening		1 Day
10	2 Evening		1 Day
11		2 Evening	1 Day
12		2 Evening	1 Day

This allows for coverage of regular days off, use of leave, etc. to minimize overtime. There are times, however, because there are only seven Sergeants assigned to Patrol (there is one at the Mall and one in Detectives) when only a single Sergeant will be scheduled to supervise the shift. Another way to examine this is shown in the table, below:

POST	1	2	3	4	5	6	7	8	9	10	11	12
S1	D	D	D	D	-	-	E	E	E	E	-	-
S2	D	D	D	D	-	-	E	E	E	E	-	-
S3	E	E	-	-	D	D	D	D	-	-	E	E
S4	E	E	-	-	D	D	D	D	-	-	E	E
S5	-	-	E	E	E	E	-	-	D	D	D	D
S6	M	M	M	M	-	-	M	M	M	M	-	-
S7	M	M	-	-	M	M	M	M	-	-	M	M
S8	-	-	-	-	-	-	-	-	-	-	-	-
S9	-	-	-	-	-	-	-	-	-	-	-	-
Days	2	2	2	2	2	2	2	2	1	1	1	1
Evenings	2	2	1	1	1	1	2	2	2	2	2	2
Midnights	2	2	1	1	1	1	2	2	1	1	1	1

This shows that there are some instances wherein the Department does not have adequate coverage with at least two Sergeants assigned to each post. This results from the Department's attempt to schedule Sergeants to rotate through the schedule with their personnel.

Recommendation: Make no changes to the current deployment. If funds become available, add one Sergeant to fill in rotation S8 (allowing the days and evenings to be covered with two scheduled Sergeants). If funds become available for an 11th Sergeant, fill rotation S9 which would enable the midnight shift to have consistent coverage by two scheduled Sergeants. The cost of the first position would be \$161,000 per year and the cost of filling two such positions would be approximately \$322,000 per year.

7. THE MANAGEMENT OF PROACTIVE ENFORCEMENT IS NOT CURRENTLY A HIGH PRIORITY FOR THE DEPARTMENT

The project team also examined the current distribution of various proactive activities within the Police Department. That which is most easily tracked are traffic citations; other indicators are less well tracked in the LTPD. The exhibit, which follows, shows the number of citations for a recent nine (9) month period (January, 2010 – September, 2010) for personnel assigned to patrol (we have kept the actual names confidential).

TOWNSHIP OF LAWRENCE, NEW JERSEY
Police Department Staffing Study

Officer	Citations (Jan-Sep)	Percent
1	7	0.1%
2	52	0.8%
3	33	0.5%
4	9	0.1%
5	114	1.8%
6	243	3.9%
7	39	0.6%
8	6	0.1%
9	172	2.7%
10	462	7.3%
11	180	2.9%
12	0	0.0%
13	80	1.3%
14	19	0.3%
15	36	0.6%
16	18	0.3%
17	115	1.8%
18	162	2.6%
19	128	2.0%
20	96	1.5%
21	12	0.2%
22	107	1.7%
23	114	1.8%
24	46	0.7%
25	210	3.3%
26	3	0.0%
27	268	4.3%
28	407	6.5%
29	124	2.0%
30	401	6.4%
31	1,329	21.1%
32	223	3.5%
33	71	1.1%
34	76	1.2%
35	106	1.7%
36	78	1.2%
37	236	3.7%
38	3	0.0%
39	0	0.0%
40	61	1.0%
41	27	0.4%
42	119	1.9%
43	56	0.9%
44	31	0.5%
45	123	2.0%
46	102	1.6%
Total	6,304	100.0%

It is apparent from a review of the information contained in the exhibit above that there is a wide disparity between personnel. Some Patrol Officers have generated

fewer than five citations in the past year and others having over 400, with one Officer accounting for over 1,300, or more than one in five issued.

Traffic enforcement should not be viewed as an activity isolated to itself – the goal of engaging in traffic enforcement is to reduce the incidence of injury and fatal accidents in the community. One way to measure the relationship between enforcement and accidents is the Traffic Enforcement Index originally developed by Northwestern University’s Traffic Safety Institute. The project team’s analysis of this relationship in Lawrence Township is shown, below:

Measure	2010 Number
Citations	8,933
Injury Accidents	299
Traffic Enforcement Index	29:1

Use of this analytical tool in New Jersey and around the country has shown that effective traffic enforcement programs will result in traffic enforcement index calculations between 1:30 / 1:40, which is only slightly greater than that exhibited by LTPD Officers. This issue in Lawrence, however is the disparity in the balance if citations issued among Officers. The goal of an effective traffic enforcement program is to focus on those traffic offenses and in those areas that are known to have resulted in accidents.

The analysis of traffic proactive enforcement is an example of how proactivity can have an impact on a community. A similar approach is appropriate for addressing criminal and quality of life issues – the true meaning of a successful community policing effort. This process for evaluating the community or problem solving efforts in a municipality should include the following elements:

- Collect descriptive data (the Department does much of this already) about crimes, traffic events, incidents, etc.

- Analyze those data to determine if there are issues or trends which should be addressed by the Police Department (this is the role of a crime analyst).
- Determine the best possible way to deploy available resources to address those issues.
- Re-evaluate the data to determine if the deployment approaches have had the desired impact on the issue.
- Redeploy existing personnel to targets of enforcement utilizing available proactive time or create a special enforcement emphasis to accomplish this, as appropriate.

Recommendation: Encourage a broader level of participation in the traffic enforcement program in the Police Department. Current levels of enforcement are appropriate given the numbers of injury accidents in the community.

8. OVERALL MANAGEMENT OF PATROL AND OTHER FIELD RESOURCES CAN BE ENHANCED THROUGH THE USE OF AVAILABLE DATA AND APPLIED ANALYSIS.

The project team's analysis of patrol staffing needs shows that the Police Department has adequate staff resources with which to provide a very high level of service in Patrol services. However, the project team found that patrol operations are managed reactively rather than proactively. The primary observations by the project team include:

- Maintaining supervisors in the station is given a priority over maintaining field supervision - minimum staffing on some shifts is a single Sergeant. The project team has recommended a redeployment of Sergeants to improve this issue.
- Field supervision is generally limited to Sergeant's participating in higher risk calls. The Lieutenant has little direct interaction with personnel in the field.
- There are limited patrol plans put into place by patrol supervisors or management. These are typically limited to one or two locations at which Officer are required to observe for some period of time. During ride-alongs by the project team, these drive-bys were cursory.
- Proactive enforcement by Patrol is highly variable and not directed by supervisors. As was shown in our analyses earlier in this chapter, the evening shift has very little usable proactive time.

- Beat assignments can change frequently – thereby reducing the “ownership” that individual Patrolman may feel for their areas of responsibility. Observations during ride-alongs indicated that beat assignments were viewed as optional, with personnel concentrating their patrol activities in the busiest areas of the Township.

Because of these observations, the project team recommends that the Department adopt a management approach that focuses more closely on holding patrol more accountable. The approach recommended by the project team relies on increased use of data, on planning and scheduling of patrol proactive activity, etc. The following points summarize the approach we recommend:

- Patrol Sergeants need to take a direct approach to planning and managing each patrol team and they need to be accountable to problem solving plans and standards to the Patrol Lieutenant.
- Patrol Officers should be given primary assignments to community policing areas within each beat. This will enable them to take some ownership for the problems in their areas as well as their resolution. These community policing zones should be smaller than the beats – enabling Officers to work an assigned beat area – while focusing their proactive activities on the specific issues of their community policing zone.
- Officers should develop with their supervisors an action plan for their beat and more specifically for their community policing zone.
- The Department should be forwarding notice of all complaints, incidents, accidents, etc. to the Officers responsible for each community policing zone. This will increase their accountability and will develop and eventually improve the foundation for community policing developed by the Department.
- Officers should be given specific responsibilities to accomplish during their shift. This should include (but not be limited to), the following:
 - Addressing citizen generated complaints about quality of life issues.
 - Conducting foot patrols in specified areas.
 - Focusing on areas of potential concern, including school areas, commercial areas, parks, etc.

- Policy should require Sergeants to respond to all potentially high-risk calls. Sergeants should respond to observe and, if necessary, take charge.
- Patrol Sergeants should meet with Patrol Officers with less than three years of experience on a bi-monthly basis. These interim reviews should be focused on performance, review of specific incidents, etc. If necessary, these reviews should be complemented by more frequent post-incident reviews.

The project team recommends that this more intensive management style be initiated immediately and be maintained. It will remain important to directly manage patrol in this manner going forward. It should be noted that for Lawrence, this returns them to a mode of enforcement that was in place years ago.

Recommendation: The Police Department should adopt a two-step process to enhancing the delivery of Patrol services. These should include Sergeants taking a more active role in overseeing and directing daily operations and assigning all Patrol personnel to a dedicated area of the Township on which to focus their primary proactive enforcement efforts. These mechanisms will enhance the management of Patrol and will also enhance the accountability of all personnel assigned to Patrol for the issues and problems in the community.

4. ANALYSIS OF INVESTIGATIVE STAFFING

The Lawrence Township Police Department has a Detective Bureau that is comprised of generalist investigators and a pair of juvenile detectives.

1. STAFFING IN THE DETECTIVE BUREAU IS APPROPRIATE GIVEN CURRENT WORKLOADS

The Police Department has five generalist Detectives and two Juvenile Detectives. All of the Detectives are generalists, meaning that they are assigned property crimes and crimes against persons. This is a common approach in small and mid-sized law enforcement agencies. The generalist Detectives work a rotating 5-week schedule, depicted below:

	<u>Sunday</u>	<u>Monday</u>	<u>Tuesday</u>	<u>Wednes.</u>	<u>Thursday</u>	<u>Friday</u>	<u>Saturday</u>
D-1	RDO	1300 - 2300	1300 - 2300	1300 - 2300	RDO	1300 – 2300	RDO
D-2	RDO	0800 - 1800	0800 - 1800	RDO	0800 - 1800	0800 – 1800	RDO
D-3	RDO	0700 - 1700	0700 - 1700	0700 - 1700	RDO	0700 – 1700	RDO
D-4	RDO	0700 - 1700	0700 - 1700	0700 - 1700	0700 - 1700	RDO	RDO
D-5	RDO	RDO	RDO	1300 - 2300	1300 - 2300	1300 – 2300	1300 - 2300

This approach provides for evening coverage by at least one Detective six days per week. The bolded days (Monday through Tuesday in D-1 and Wednesday through Saturday in D-5) are those days on which that Detective is responsible for all after-hours calls – even on their RDO day of Sunday.

From the 2010 Annual Report, it was determined that general assignment Detectives handled 667 cases in 2010 as compared to 569 in 2009. This represents an

increase of 98 cases, or 17.2%. The clearance rate for cases handled by the general assignment Detectives was reportedly 39% in 2010, as compared to 40% in 2009. The two Juvenile Officers investigated 352 cases in 2010, compared to 262 in 2009, an increase of 90 cases, or 34.4%. These data are shown below:

Detective	Assignment	Date of Report	Total Assigned (2010)	Open on Date of Report	Closed by Arrest
A	Juvenile	1/18/11	173	35	77
B	Juvenile	1/18/11	179	49	75
C	General	1/18/11	156	44	29
D	General	1/18/11	135	51	30
E	General	1/18/11	149	53	44
F ²	General	1/18/11	83	26	14
G	General	1/18/11	146	26	47

The distribution of caseload is relatively consistent across all Detectives in both Juvenile and General assignments. The project team conducted 'desk audits' with detectives to assess the level of active cases (those worked in the past 30 days) compared to open cases (which may include cases that have not been actively worked recently). The results of these desk audits was a significant reduction in active cases, as shown:

Detective	Assignment	Open on Date of Report
A	Juvenile	17
B	Juvenile	22
C	General	21
D	General	18
E	General	20
F	General	17
G	General	19

² This Detective was moved from SRO to generalist investigator in the summer of 2010, thus showing much lower productivity figures compared to the other Detectives assigned.

The project team discussed the significant drop between the original report and the desk audits conducted a month later in late February. The explanation we received was that the Lieutenant in the Division had placed increased scrutiny on the older cases and encouraged staff to write supplements and close cases in which investigative leads and options had been exhausted. The project team found that the caseloads in the Detective Bureau were typified by the following:

- As is the case with many small to mid-sized departments, many of the cases assigned to Detectives would be viewed as 'minor' in a larger agency.
- That said, the LTPD does reassign cases back to Patrol Officers for follow-up when the case is minor, has been closed by arrest, etc.
- Case loads ranged between a high of 22 and a low of 17. During the desk audits with most Detectives, it was found that the caseloads as reported in the caseload management system were, in fact, active cases with on-going or recent follow-up in the past 30 days. In fact, many had been assigned within a 2-week period preceding the desk audits.
- During desk audits it became clear that the case-management system was not being used consistently or to its full advantage by the Detectives or the supervisors in the unit. This will be discussed further in the next section in this chapter.
- The project team views a Detective caseload of 15-20 active cases as indicative of appropriate staffing. The Detectives in the LTPD are in this range now that caseloads are being more aggressively monitored.

Recommendation: The LTPD is staffed appropriately in the Detective Bureau.

2. MODIFICATIONS TO THE CURRENT APPROACH TO CASE MANAGEMENT WOULD ENHANCE ACCOUNTABILITY AND IMPROVE SERVICE TO THE COMMUNITY.

The project team's analysis shows that the staffing of the unit is appropriate given the service delivery objectives of the Police Department. A decision to change these objectives (i.e., to not follow-up on misdemeanors using Detectives) would enable the Department to revisit the staffing required and to potentially reduce it as noted

above. A larger issue for the Detective Bureau is the lack of case management. The project team's findings include the following:

- Cases are screened by the Detective Bureau Lieutenant before they are assigned to staff.
- The project team found that Detectives infrequently attend Patrol briefing as a way of sharing information and as a way to learn about trends in the community. When this is done, it helps to maintain a good working relationship between the two units.
- The Lieutenant does assign like cases to the same Detective (particularly when there are trend cases – vehicle burglaries, residential burglaries, etc.).
- The project team found that Detectives were largely self-managing their caseloads. There was little input from the Lieutenant while cases were actively being worked except through informal contact. The unit does not have regular meetings of all Detectives. There are almost no one-on-one meetings between Detectives and either the Lieutenant or Sergeant in the Detective Bureau to review case progress.
- Policy allows for cases to be kept open for 90 days. In the project team's experience this is quite long

The Matrix Consulting Group's findings suggest that the policies and procedures already in place more than adequately describe an excellent approach to managing investigations and follow-up. The project team recommends that the LTPD more closely follow existing policy as a way to enhance management of these important activities.

Recommendation: The Lieutenant in the Criminal Investigations Section should institute several formal management approaches as already described in policies. These steps should include the establishment of tighter deadlines, regular team meetings, and one-on-one reviews of caseload and approaches.

5. ANALYSIS OF SUPPORT SERVICES STAFFING

This section of the report addresses issues in sections of the LTPD that provide support to the primary law enforcement operations of the Department.

1. THE PROJECT TEAM'S ANALYSIS OF THE RECORDS SECTION INDICATES THAT IT IS APPROPRIATELY STAFFED AT THE CURRENT TIME.

The Records Section is responsible for maintaining and managing the Police Department's records, including investigations, operations, arrest reports, juvenile custody and vehicle reports. The Section is staffed with a Records Supervisor and two (2) Principal Records Transcribers, who are also responsible for taking requests for records over the phone, in person, and via fax. The Records Section processed 5,348 reports in 2010, which represented an increase of 466 over the previous year. Reports processed for the past five years are presented in the table below.

Year	Reports
2006	6,154
2007	6,205
2008	5,354
2009	4,882
2010	5,348
Pct. Change from 2006 to 2010	(13.1%)

As the table shows, the number of reports decreased from 6,154 to 5,348 during this time, representing a 13.1% decrease over the four-year period. Although the decrease has been somewhat consistent, it has not been an even decline, as the number of reports actually increased from 2009 to 2010, as noted above.

There are several duties for which the Records Section staff are responsible. The primary duties relate to responding to records requests from the public, the media and other agencies and answering phone calls regarding the status of reports,

redactions in reports, fingerprinting, issuance of permits, and assembling cases for court. In calculating the time expended on these primary duties, the project team calculated an availability of 81.2% for the average staff member in the Records Section to account for leave usage, training, administrative duties, etc. This results in 1,689 net hours per FTE.

The following table provides an analysis of the time expended in the primary Records functions:

	Units of Activity	Number of Minutes per Task	Total Minutes
Process Records Request	2,402	8	19,216
Process Reports	5,348	8	42,784
Phone Calls and Response to Request for Information	9,000	10	90,000
Expungements	84	60	5,040
Fingerprints	118	12	1,416
Discovery Requests:			
Criminal Case	200	20	4,000
Traffic Case	284	10	2,840
Compile Court Agenda	312	90	28,080
Process Payroll	26	240	6,240
Total FTE Minutes			199,616
Total FTE Hours			3,327
Number of FTEs Required			1.97

The table indicates that the primary workloads of the Records Section require approximately 2 full time equivalent staff members. It should be noted, however, that, like all positions, these individuals perform duties that are not accounted for in what have been termed primary duties. Further, even the primary duties outlined above do not occur in a linear fashion, but rather rise to peaks and subside during the day. Finally, the Supervisor of the Division should have some part of the day allocated to providing oversight and quality control over the processes of the Section. Therefore, the project team makes no recommendation to alter the staffing levels of the Records

Section of the LTPD at this time. As was noted above, however, records activity has been in a longer-term decline, and the Department should monitor this decline to determine if this is a trend, or a short term anomaly. If this decline continues over the next three to five years, the required staffing levels of the Section may need to be adjusted.

Recommendation: The project team does not recommend any change in the current staffing levels in the Records Section of the Department.

2. THE COMMUNICATIONS SECTION REQUIRES AN ADDITIONAL COMMUNICATIONS OPERATOR TO ENSURE ADEQUATE COVERAGE.

The Communications Section of the Department is staffed with one (1) Lead Communications Operator and seven (7) Communications Operators. Reporting to the Patrol Sergeant on duty, these Operators answer 911 emergency calls for service and communicate with Officers in the field, but also answer incoming administrative 10-digit lines, handle public traffic at the front desk, enter stolen property and missing persons information into NCIC, perform gun permit checks, run criminal histories, driver abstracts, monitor seven cells, as well as other duties.

(1) Net Dispatcher Availability Is Modeled at 1,509 Hours per Year.

While one Full-time Equivalent (FTE) staff position is scheduled to work 1,946.7 hours per year (based upon a 4 on and 2 off schedule worked by Communications Operators), modeling staffing needs based on this number does not reflect the actual number of staff required given both scheduled and unscheduled absenteeism as well as dedication to other efforts (training, administrative support, etc.). A critical workload element to determine staffing requirements is the amount of annual time available for dispatch personnel to perform their work. The Matrix Consulting Group defines net

availability as the number of hours that a dispatcher is available to perform their key roles and responsibilities after the impact of leaves and administrative responsibilities have been subtracted from their gross 1,946.7 scheduled hours of work.

The project team obtained the actual hours of leave taken by Communications Operators in 2010 from records provided by the LTPD, and determined that the average number of hours was 437.4 per Communications Operator. Subtracting this average figure from the total scheduled time of 1,946.7 hours yields a total available time of 1,509.3 hours which, for simplicity of calculations going forward in the calculations of required staffing, will be rounded down to 1,509.

(2) How Long a Dispatcher Should Be Occupied with Workload Is a Function of Several Factors.

The calculation for net availability noted previously essentially results in the amount of time each dispatcher is available to perform work. In any profession, however, no position is occupied 100% of the time. By example, most blue-collar professions, such as fleet mechanics, are ideally occupied 80% of the time performing direct work on vehicles. More relevant to the public safety field, law enforcement agencies would typically strive for patrol staff to have from 45%-50% unobligated patrol time, thereby allowing them to selectively work, in this "free time," on community-oriented problems or directed patrol activities. This proportion of unobligated time also allows for patrol units to generally be available for relatively rapid response to community generated calls for service.

How much time is dedicated to actual work in the public safety dispatch field is a function of several inter-related variables. An allowance needs to be made regarding the proportion of time desirable to have a dispatcher actually involved in call handling,

radio transmissions, keyboard entry, record search, etc. There are several reasons why direct task allocation should not be 100%, including the following:

- Dispatch centers which have excessively high utilization levels tend to "burn-out" staff and consequently have high levels of employee turnover.
- Professions which require extreme concentration during work activities, such as dispatch, air traffic control, or other professions in which failure brings unacceptable risk, should have lower work utilization rates.
- Dispatch centers which have high utilization levels experience "queuing" problems in which responses to incoming telephone calls and radio transmissions are delayed because the dispatcher is pre-occupied with other concurrent workload.
- In dispatch centers with high utilization quality begins to suffer because dispatchers must cut calls and radio exchanges short, thereby impacting dispatcher effectiveness, perceived customer service, and potentially safety in the field for law enforcement, fire, and emergency medical response professionals.

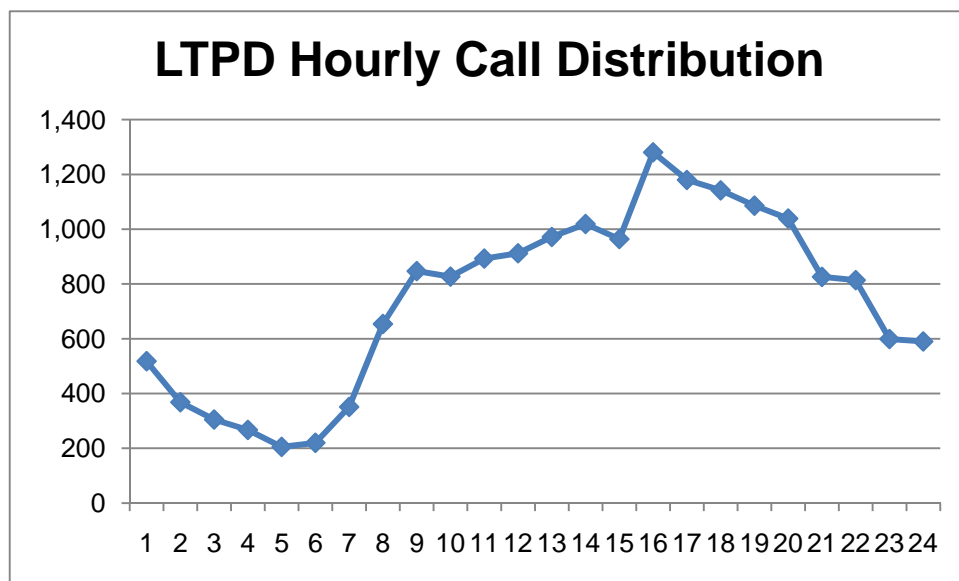
Based on these variables the Matrix Consulting Group typically uses a utilization rate of 50% for dispatchers. This implies that dispatchers will be busy performing work an average of 30 minutes per hour, or one second of every two seconds of net available time. It should be noted that this utilization or "occupancy rate" is one of the primary drivers in staffing requirements, particularly for larger dispatch centers. Modifying this variable by relatively small increments can have an important impact on staffing requirements.

(3) Workload and Data Elements Utilized in the Matrix Consulting Group Dispatcher Staffing Model.

One of the primary duties, and indeed the core responsibility of dispatcher staff, is the effective handling of community-generated calls for service. Community-generated call for service workload can be used as a primary driver in developing a dispatcher staffing model. This workload element is foundational in deriving the total

dispatcher staffing levels required based on desired services levels. These calls certainly do not represent all workload, however, such as the variety of administrative work that a dispatcher undertakes to support public safety staff in the field, radio traffic related to field unit self-initiated activities, etc. Notwithstanding this fact, community generated calls for service do reflect workloads that require mandatory responses from the dispatch agency; the community expects immediate service when it dials an E9-1-1. Whereas all other dispatcher activities are vitally important, community generated calls for service response are the primary core activities of a dispatch agency.

Community Generated Calls for Service (CFS), as defined herein, represent contacts from the community, generally via E9-1-1 landline telephone but also non-emergency lines or cell phones, ultimately resulting in one dispatched event regardless of the number calls reporting the event or the number of public safety units sent in response. As was presented in the descriptive profile of the Department's operations, there were 17,880 community-generated CFS, with the following distribution throughout the typical day.



The pattern noted, showing peaks in workload in the mid-afternoon (approximately 3:00 p.m.) with lulls in calls for service at approximately 3:00 a.m., is fairly typical with respect to public safety calls for service patterns. Of interest, and generally typical, late afternoon workload is more than six times the magnitude of pre-dawn workload that creates resource impacts on dispatch operations and public safety field personnel.

(4) APCO Has Developed a Staffing Model Based on Major Workload Elements Performed by Dispatchers.

In the last few years APCO has published a staffing model as part of their Project RETAINS efforts, developed by the University of Denver Research Institute. In effect, the APCO project RETAINS model requires several discrete data elements based on actual workloads to be effective. These include:

- Net annual staffing availability as shown above.
- Average telephone busy time (call duration in seconds), from phone records. This should ideally distinguish between law enforcement and fire E-9-1-1 calls and administrative calls for service.
- Average call completion time (in minutes, this includes time for keyboard data entry, radio transmission, address verification, etc.). Average call completion time is often not accurately available. While some agencies are capable of collecting accurate radio transmission time, other dispatcher-related workload, such as records checks or keyboard data entry by staff, is most often not available.
- Average Processing Time, or APT— which is the sum of the two above bullets. What the APCO model fails to account for is the workload directly related to other activities unrelated to a telephone call's workload; that is, by example, officer initiated activities and the variety of tasks associated with them.
- Agent Occupancy Rate (AO) which reflects the proportion of time that the agency desires a dispatcher to be occupied with workload. This is, in effect the opposite of the prior model's Utilization Rate which calculates the proportion of time a dispatcher should be free of workload as opposed to being busy with workload. Nevertheless, the concept is the same, although the mathematics differ.

In brief, the APCO project RETAINS staffing model is a generally good methodology with a few notable exceptions, but it is data intensive to the extent that many agencies do not possess the level of detail required to properly complete the model. The Matrix Consulting Group, using the APCO model as a baseline, has made some slight revisions using major work activities captured as well as some assumptions regarding other types of work. These are discussed in the following sub-sections.

(4.1) Total Time Spent on Telephone Calls and Time on Radio Transactions Are Major Workload Drivers in This APCO-Based Model.

The APCO-based model uses the actual number of telephone transactions and radio transmission transactions as primary workload drivers. Additionally, the total time associated with these activities is calculated to determine an average amount of time spent per transaction.

Data from Lawrence Township dispatch organizations do not have the refinement with respect to both telephone and radio transmission transactions. However, the project team's experience indicates that the average call for service time for medium-sized departments **is approximately 4.4 minutes**. We will utilize this "typical" number in the calculations below.

While radio transmission information is not available, the Matrix Consulting Group has significant experience in other agencies whereby radio transmission information is recorded. In brief, approximately 2.5 radio transmissions of "significance" occur for every call for service each radio transmission occupying 24.65 seconds of time. This data set will be assumed for Lawrence Township radio transmission dispatch activity.

Finally, with respect to calls for service time, while APCO's APT calculates time for all calls for service effectively from call receipt to call dispatch, assuming the bulk of work occurs at the front-end of a call (e.g. discussion with reporting-party, address/name verification, dispatching of primary and secondary units, etc.).

Based on the totality of information and assumptions above, the following reflect that calculated hours for telephone and radio-related activities for Lawrence Township's dispatch operations.

2010 – Telephone and Radio-related Data for Lawrence Township

Transaction Type	Lawrence Twp.
Law Enforcement Calls for Service	17,880
Avg. Time Per Call (seconds)	264.0
Total Time all Calls (seconds)	4,720,320
Radio Transmissions (est.)	44,700
Avg. Time Per Radio Transmission (seconds)	24.65
Total Time on Radio (seconds)	1,101,855.0
Total Seconds for Transactions	5,822,175
TOTAL ANNUAL WORK HOURS	1,617.3

The above information reflects the calculated hours dedicated to working telephones and radios for all Lawrence Township dispatcher staff. This information essentially represents the base data used in the APCO Project RETAINS Model. However, the Matrix Consulting Group has chosen to add one additional workload element based on our observations of a variety of dispatch agencies. This is noted in the subsection below.

(4.2) Keyboard Entry Time Estimates Augments the APCO-Based Staffing Model.

Whereas dispatchers spend a significant time multi-tasking through talking/listening on the telephone or radio while typing entries and creating CAD incidents, there are periods where keyboarding is accomplished and entries are made

independent of these activities. There are no specific standards related to such keyboard entry, and in our experience dispatch agencies have not adopted software which tracks keystrokes, particularly independent of radio and telephone activities. Nevertheless, this is hands-on workload not captured in the original APCO model. To accommodate such workload, the Matrix Consulting Group estimates that each transaction noted above (calls for service and radio transmissions), has 2-seconds of independent keyboard entry exclusive of other concurrent data entry tasks which, at 60-words per minute, reflects two five-letter characters entered for each transaction. The result of this calculated workload based on an additional 62,580 key stroke transactions is **18** additional workload hours dedicated to independent keying.

(4.3) APCO-Based Staffing Results.

Using the information noted previously, the following table provides the baseline staffing results for all dispatch activity using the APCO-based model.

2010 - APCO-Based Baseline Staffing Model
Based Upon Transactional (calls, radio, keystroke) Workload

Dispatch Transactions	
Number of transactions	125,160
Transaction Hours	1,635
Employee Availability	
Net Employee availability (hours)	1,509
Agent Occupancy Rate (AO)	50%
True Employee Availability (hours)	754.5
Staff Needed	
Full Time Equivalent Dispatchers required based upon work.	2.17
Turnover rate	11.5%
FTE's Baseline Required	2.45

The table above reflects the baseline dispatcher staffing required based upon the transactional variables presented. As the table indicates, the workload handled by Communications Operators requires a total of 2.45 FTEs, which would indicate that only

a single Dispatcher is necessary on each shift simply to handle the workload volume. However, note that an assumption we will make is that the Communications room will be staffed with a minimum of two (2) Dispatchers per shift in order to cover breaks, and to provide sufficient coverage to handle incoming calls in the event of an extended emergency being handled by one of the Dispatchers. Therefore, although the model indicates that one (1) Dispatcher is sufficient to handle the call volume on each shift, we will increase this to two (2) per shift.

In analyzing Weekly Squad Schedule Reports for 2010, which indicate the numbers of staff who were actually on duty for each shift, the project team conducted a sample of 107 days, and determined the following:

- On day shift, there were fewer than two (2) Communications Operators on 31 days, or 29.0% of the time.
- On evening shift, there were fewer than two (2) Communications Operators on 34 days, or 31.8% of the time.
- On midnight shift, there were fewer than two (2) Communications Operators on 55 days, or 51.4% of the time.

Although there are exceptions to the rule, generally speaking, the shift supervisor will pull a Police Officer off of patrol to cover a dispatch position when there are fewer than two Communications Operators on duty. This is particularly true of the day and evening shifts when the predominant numbers of calls for service occur. Although this use of sworn personnel is a necessity, it is also a poor use of a skilled officer for a duty that may be more economically and efficiently performed by civilian Operators.

As was noted above, for several reasons, the project team strongly recommends that there be two dispatch positions on duty at all times. However, as can be seen from the results of the sample, scheduling two Communications Operators on each shift is

frequently insufficient to assure that there are two on duty. It is therefore recommended that the LTPD be authorized to cover each shift with three Communications Operators, which will, with greater probability, result in two being available.

Recommendation: Add two (2) Communications Operator positions, to increase the total number to 11 authorized, at a salary cost of \$77,918 (current average of incumbents, not including Lead Dispatcher). With benefits calculated at 45.9%, this results in a total cost of \$113,682.

3. PROPERTY AND EVIDENCE

This section focuses on the receipting, handling protocols, secure storage, and final disposition of recovered property and evidence. The Department's property/evidence control system should include the following:

- All property coming into the Department's possession is properly accounted for and maintained securely.
- The integrity of the chain of custody is maintained for all evidentiary property. Protocols are in place to ensure that all transfers or releases of evidence for laboratory analysis or for court purposes is properly recorded.
- There should be a system for conducting regular inspections and audits of the property/evidence area. The inspections are to ensure the area is kept neat and orderly, and Department procedures are followed. The audits, which should be conducted no less than annually, should ensure that at least 10 percent of the "high-risk" items are hand-checked. High-risk items include: money, precious metals, jewelry, firearms, and drugs.
- Property/evidence is returned and/or destroyed in a timely manner consistent with applicable state statutes.

The Matrix Consulting Group evaluated the property and evidence section procedures and protocols, with the results of that analysis as follows:

- The Department has well documented procedures governing the collection, recording, storage, and disposal of evidence and recovered property.
- The facility has secure primary and temporary storage locations to house property and evidence. The primary storage area is alarmed with controlled access using strict key controls and access codes. Doors are properly locked

when evidence personnel are not in attendance and a log is maintained to record the names of all who enter restricted areas. No personnel are allowed to enter restricted areas unless accompanied by property/evidence staff.

- Temporary and permanent refrigerated storage is provided for perishables.
- Officers complete property receipts with details of their submissions. The property custodian/evidence clerk copies that information into a computer software program for control and accountability purposes. All subsequent movement of the property/evidence is recorded on both the computer system and on the original property receipt.
- The Department is engaged in an effort to purge old property and evidence. Once this effort is completed, the Department intends to conduct random audits of the room.

The Matrix Consulting Group found that the Department has excellent directives governing the submission of property and evidence. All documentation is maintained in an organized fashion in electronic and hard-copy format. It is easy to trace the storage location and history of all items. Inspections and audits of the property evidence sections should be conducted regularly.

Recommendation: Protocols concerning property/evidence audits should be modified to require that at least 10 percent of the high-risk items are checked no less than annually. Personnel assigned to the property/evidence component should place more emphasis on identifying property eligible for disposal – this is in line with the current efforts in the Department to purge older items.

4. THE DEPARTMENT IS SERVED BY A SINGLE INFORMATION TECHNOLOGY OFFICER.

There is a single position in the Department dedicated to serving the information technology requirements of the LTPD. This position is filled by a sworn Officer who performs duties that include the following:

- Check backup tapes and ensure servers are operable
- Administer voice mail for the LTPD, Courts, and Township offices.
- Reprograms lines and phones, and maintains passwords

- Controls door access
- Ensures operability of security cameras, and burns videos to disks as required.
- Installs and maintains MDTs in patrol units, and assists Officers with problems downloading video from cameras
- Maintains, programs and troubleshoots radio systems
- Maintains ANI/ALI in 911 system
- Performs limited forensics on computer hard drives taken as evidence
- Performs Visual Basic and SQL programming.

(1) There Are Few Maintenance Records of Work Performed or the Backlog of Information Technology Requests

There were reportedly two information technology employees in prior years, one of which was a Lieutenant position. After the Lieutenant retired, the position was not filled. Interviews with the current information technology officer indicate that the incumbent believes there is a need for an additional employee in the section to handle the workload.

The project team's experience indicates that it is not uncommon for a medium-sized Department such as LTPD to be staffed with a single information technology employee, as the typical ratio of personal computers to information technology professional is approximately 100 : 1, which is far greater than the current number in LTPD. However the project team believes the issue of workload documentation needs to be addressed prior to any decision regarding optimum staffing levels.

In interviews, it was determined that the information technology Officer does not document the work performed in order to track the allocation of time expended, to prioritize work, and to track the backlog of work needing to be done. These are critical

elements of managing the function, and, at a minimum, are required to determine whether some work needs to be contracted out, and whether current staffing is sufficient. Currently, the incumbent is relying upon memory to prioritize workloads. However, as the Department grows, not only in size but in complexity as well, this device will become less and less adequate as an appropriate management tool.

There are many off-the-shelf workload tracking software solutions for small to medium sized organizations that are both inexpensive and sufficient for the Department's needs. However, as an interim solution, the information technology officer should begin capturing the following data elements for each work request:

- Name of Requestor
- Date
- Description of Request
- Date Needed
- Priority Code (e.g., High, Medium, Low)
- Estimated hours required for completion
- Cost of Materials
- Cost of contracted services

Robust software will utilize this information providing graphic representations of variations in projected workloads, providing managers with the ability to determine whether, and what types, of services in the backlog may need to be outsourced.

Recommendation: Begin capturing workload information in electronic format. The data captured should, at a minimum, include the elements listed above, however, the project team recommends that the Department also invest in an inexpensive software package that provides more robust management analytical capability. This software should cost no more than \$5,000.

(2) The Department Should Civilianize the Information Technology Technician.

In the previous sub-section, the project team outlined the primary duties of the Officer assigned to the provision of information technology support in the LTPD. Although the project team believes that the incumbent officer is fully proficient in the duties performed, these duties nonetheless do not require a sworn officer.

As is the case in assigning Officers to dispatch positions, the position of information technology technician is one for which professionals in private industry train and are competent to perform. The assignment of a sworn position for these duties fails to maximize the investment the Township has made in the law enforcement training provided to the Officer. Further, civilian information technology technicians are more cost-effective than sworn officers in this position.

Recommendation: On attrition, convert the position of Information Technology Officer to a civilian position. Although there is no current position for Information Technology Technician in the Police Department currently, assuming the position would be paid at a rate 50% greater than the average Communications Operator, this would save the Department approximately \$30,000 to \$35,000 in salary costs, exclusive of the differential in benefits.

APPENDIX A

DESCRIPTIVE PROFILE

This Appendix provides the profile of the Lawrence Township Police Department (LTPD) based on interviews with personnel throughout the LTPD, collection of key workload data and statistics, and review of available documents. Note that as of this date, we have not received all requested data and are requesting additional information. As we receive this data and information, we will incorporate it into the profile. The profile is organized as follows:

- Organizational Structure and Budget
- Personnel Key Roles and Responsibilities
- Key Operations and Primary Workload Activity
- Summary of General Departmental Information

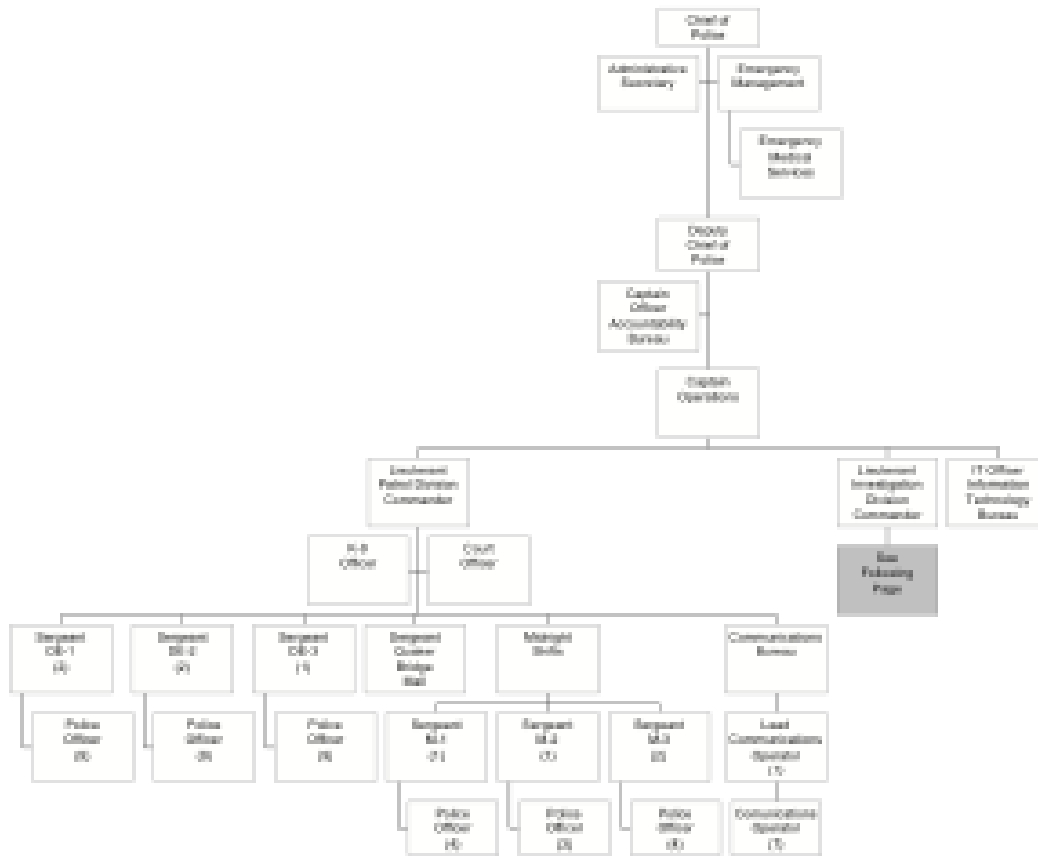
The first section provides the overall management and organizational structure of the LTPD, including the number of authorized positions.

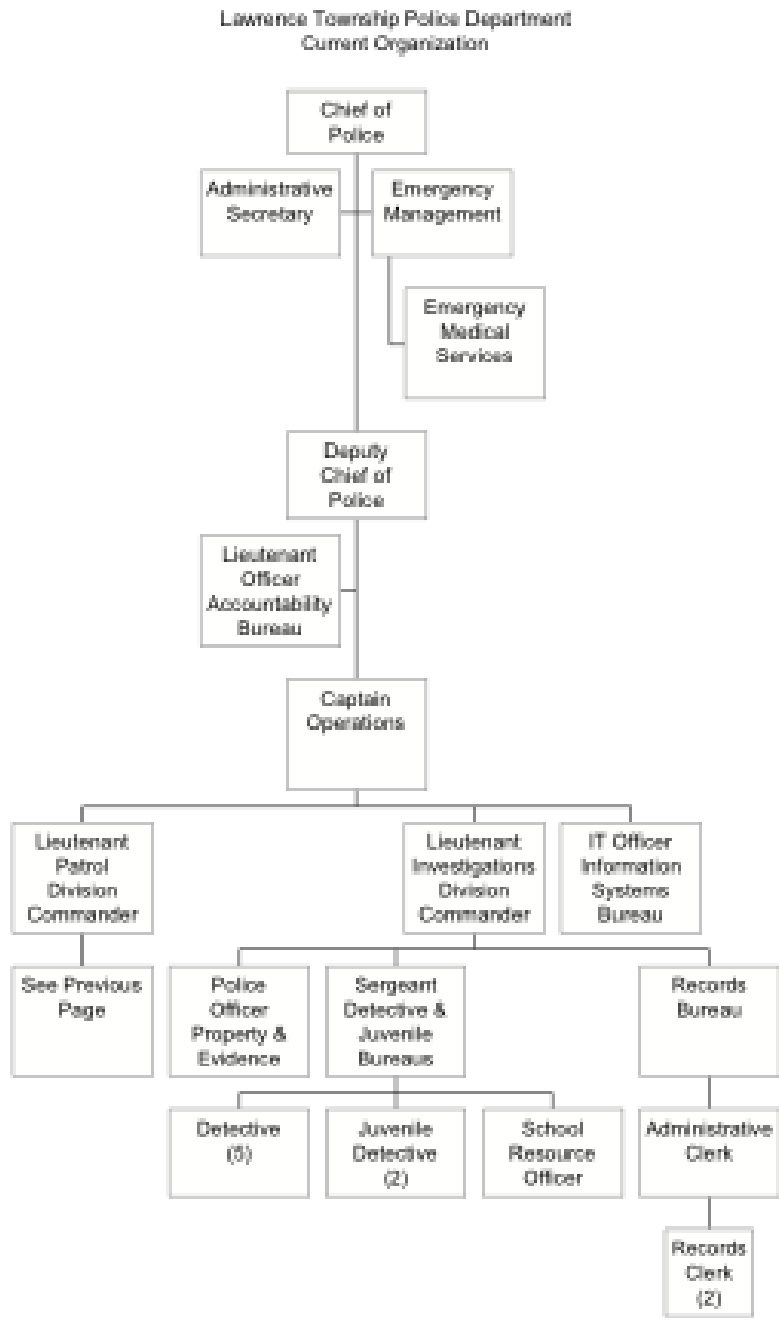
- 1. THE LTPD PROVIDES SERVICES WITH CY 2011 STAFFING THAT INCLUDES 65 SWORN POSITIONS, 14 NON-SWORN POSITIONS, AND A BUDGET OF OVER \$8.3 MILLION.**

The Lawrence Township Police Department is organized as follows:

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Police Department Staffing Study

Lawrence Township Police Department
 Current Organization





(1) Authorized LTPD Staffing Levels Have Declined in the Past Five Years.

The following table identifies the number of authorized positions between CY 2006 and CY 2010:

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Position	CY 2006	CY 2007	CY 2008	CY 2009	CY 2010
Sworn	70	70	70	69	65
Non-Sworn:					
Admin Secretary	1	1	1	1	1
Records Admin Clerk	1	1	1	1	1
Emergency Management	1	1	1	1	1
Clerk Transcriber	4	3	3	3	3
Communications Operator	9	9	9	9	9
Total Non-Sworn	16	15	15	15	15
Total	86	85	85	84	80

The points below highlight the primary staffing changes over the past several years:

- The level of authorized sworn staffing has declined by three positions from 2006 to the present time.
- In 2007, the Department lost a Clerk Transcriber position in Records.
- The LTPD lost one Communications Officer position in 2010 – this position is being actively filled at present – the authorized figure remains at nine (9).

The staffing levels in the above table, as well as in the following organization charts, reflect authorized positions as reported in annual reports.

(2) The LTPD Has an Approved CY 2010 Budget Allocation of Over \$8.3 Million, Including All Cost Centers.

The following table shows the LTPD budget information between FY 2008 and FY 2010:

Category	CY 2008 (Actual)	CY 2009 (Actual)	CY 2010 (Budget)
Police Department			
Salaries and Wages	\$7,134,249	\$7,050,209	\$7,451,405
Other Expenses	\$248,008	\$223,323	\$239,000
Total Police	\$7,382,257	\$7,273,532	\$7,690,405
Police Dispatch/911			
Salaries and Wages	\$366,471	\$374,455	\$380,493
Other Expenses	\$904	\$1,400	\$1,000
Total Police Dispatch	\$367,375	\$375,855	\$381,493
Office of Emergency Management			
Salaries and Wages	\$55,132	\$57,927	\$50,722
Other Expenses	\$902	\$87	\$6,000
Total Emergency Mgt.	\$56,034	\$58,014	\$56,722
Emergency Medical Services			

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Salaries and Wages	\$232,973	\$403,192	\$432,845
Other Expenses	\$274,859	\$174,459	\$35,000
Total Emergency Med.	\$507,832	\$577,651	\$487,845
TOTAL POLICE	\$8,313,498	\$8,285,052	\$8,596,465

Highlights from a review of the table, above, include the following.

- There was a slight decrease in expenditures in the Police Department from 2008 to 2009 of \$112,501, primarily due to Police salaries.
- Budgeted expenditures for CY 2010 were anticipated to be approximately \$406,468, or about 5%, greater than CY 2009 actual expenditures.
- Although authorized positions have declined from 85 to 80 from 2008 to 2010, salaries and wages for all cost centers have increased by \$297,640, or 3.8%, during this time period.

The next section provides details related to the compensation levels for position classifications within LTPD.

(3) Compensation

The following table shows the number of authorized positions per classification and the current wages (both total for the classification and the average per position):

Classification	Number	Total Wages	Per / Wages
Police Chief	1	\$154,605	\$154,605
Deputy Police Chief	1	\$146,287	\$146,287
Captain	1	\$141,105	\$141,105
Lieutenant	3	\$374,035	\$124,678
Sergeant	9	\$1,115,238	\$111,524
Police Officer - Authorized	52	\$4,902,954	\$94,288
Administrative Secretary	1	\$62,450	\$62,450
Administrative Clerk	1	\$46,201	\$46,201
Clerk Transcriber	3	\$100,344	\$33,448

The next section provides descriptions of the primary duties and responsibilities of authorized personnel in the Lawrence Township Police Department.

2. KEY ROLES AND RESPONSIBILITIES

The table below summarizes the key roles and responsibilities for each of the full-time and part-time positions (based on interviews with more than half of the LTPD personnel).

Budgeted Staffing by Classification		Key Roles and Responsibilities
	No.	
ADMINISTRATION		
Chief of Police	1	<ul style="list-style-type: none"> • Provides executive management and overall leadership for the Lawrence Township Police Department, including serving as the liaison between the Township Manager, the LTPD, and the community. • Monitors and addressing the resource needs of the LTPD relating to personnel, technology, and equipment. • Attends regular Township Manager meetings to discuss major issues, capital projects, etc., and holding meetings with LTPD command staff each to discuss general issues and challenges, rotations, status of investigative cases, any special events, etc.). • Participates in weekly command staff meetings.
Deputy Chief of Police	1	<ul style="list-style-type: none"> • Provides daily supervision of the Department and acts as Chief in absence of Chief of Police. • Manages the budget, which includes preparation, monitoring, and tracking expenditures. • Performs routine administrative functions in the day-to-day management of the Department. • Directs routine overall operations of the Department; works closely with the Chief to ensure decisions reflect the mission/goals of the Department. • Coordinates grants and is responsible for the application and management of all LTPD grants. • Ensures fiscal responsibility of the LTPD through approval of purchases and overtime use. • Plans, develops and reviews all LTPD rules, regulations and general orders. • Serves as the Internal Affairs commander. • Participates in weekly command staff meetings.

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Budgeted Staffing by Classification		Key Roles and Responsibilities
	No.	
Lieutenant – Officer Accountability	1	<ul style="list-style-type: none"> • Investigates complaints regarding Officer conduct. • Conducts random drug testing of sworn personnel twice annually. • Utilizes results of investigations to recommend training and other corrective actions. • Participates in weekly command staff meetings.
Administrative Secretary	1	<ul style="list-style-type: none"> • Provides executive assistance to the Police Chief, including handling phone calls, scheduling appointments, managing the calendar, processing correspondence, and supporting presentations. • Assists with the budget development and expenditure tracking, including the processing of purchase orders and invoices. • Handles the processing and distribution of mail for LTPD personnel • Coordinates such activities as grant management and processing special events permits.
EMERGENCY MANAGEMENT		
Emergency Management Coordinator	1	<ul style="list-style-type: none"> • Responsible for coordinating the Township's emergency responses. This includes developing, updating and maintaining emergency response plans. • This is a civilian position.

Budgeted Staffing by Classification		Key Roles and Responsibilities
	No.	
OPERATIONS		
Captain	1	<ul style="list-style-type: none"> • Serves as the third most senior member of the command staff in the Police Department. Reports to the Deputy Chief. • Will fill in for the role of the Patrol and Investigations Division Commanders (Lieutenants) when they are absent. • Serves as the Training Officer for the LTPD. In this capacity, the Captain manages, monitors, and / or delivers training for LTPD personnel, including the minimum in-service training requirements every two years, and ongoing trainings for firearms, CPR, and any specialty training. • Participates in weekly command staff meetings. • Provides primary supervision for field and investigative operations, including acting as the direct report for the Lieutenant positions, as well as the Information Technology Officer. • Reviews police reports written by the field personnel.
PATROL		
Lieutenant	1	<ul style="list-style-type: none"> • Implements Department policies, procedures, goals and objectives. • Works closely with the Operations Captain to accomplish the goals of the Department. • Oversees field patrol activities, provides assistance as appropriate, responds to major incidents and emergencies as necessary. • Develops and implements specific programs and strategies to address crime problems in the District. • Serves as TAC Commander for the LTPD, coordinating training and serving as incident commander. Also serves as Domestic Violence Team Coordinator. • Supervises the FTO program. • Supervises and oversees Communications Operators, including all operational and administrative policies and procedures. • Develops monthly productivity reports of the Patrol Division. • Ensures expeditious processing of warrants and summonses. • Participates in weekly command staff meetings.

Budgeted Staffing by Classification		Key Roles and Responsibilities
	No.	
Sergeant	8	<ul style="list-style-type: none"> • Most Day/Evening (DE) shifts are scheduled with 2 Sergeants. Informally, this results in one Sgt. Designated as “inside” and one “outside”. • Outside Sgt. provides primary supervision for the patrol officers during the respective shifts, including responding as the primary unit to calls for service. • Inside Sgt. Reviews and approves Officer reports, ensures cleanliness of work areas, ensures proper amounts are in bail safe box, checks patrol vehicles for maintenance needs, reviews calls for service to ensure Officer adherence to general orders and LTPD policy, checks prisoner detention records, randomly reviews traffic stops on DVD, as well as Dispatcher call handling procedures. • Inside Sergeant typically supervises the Communications personnel. • Reviews the crime reports written by patrol officers, as well as writing crime reports for which they were the primary responding unit. • Engages in officer-initiated activities such as making traffic stops. • Sergeants work a 4 & 2 schedule. DE Sgts. Switch days/evenings as the 4&2 rotation dictates. Midnight Sgts. Work midnight shifts throughout the year. • 1 position works a 5-8 hour schedule is assigned to the Day Shift - working Wednesday through Sunday, and is also the key person for equipment and technology, including identifying requirements and ongoing maintenance. • Positions make fixed post and directed patrol assignments to patrol officers and also follow-up on investigation cases.
Sergeant – Quaker Bridge Mall	1	<ul style="list-style-type: none"> • Stationed at Quaker Bridge Mall (QBM). • Responds to calls for service at QBM, calling for backup as required. • Maintains working relations with Mall management and retail managers and employees. • Coordinates with Mall Manager and Security Manager on any trends, patterns of crime, special events, etc.

Budgeted Staffing by Classification		Key Roles and Responsibilities
	No.	
Police Officer - Patrol	39	<ul style="list-style-type: none"> • Provides primary response to community generated calls for service, engaging in proactive duties such as making traffic stops, patrolling problem areas as necessary and directed, and following up on investigative cases. • Provides direct field enforcement of all applicable laws within the Township; makes arrests, issues citations. • Provides a visible law enforcement presence in the community. • Writes reports, conduct preliminary investigations of crime, conducts follow-up investigations as appropriate. • Engages in neighborhood patrols, directed patrol, traffic enforcement and other proactive activities to reduce crime. • Responds to questions, concerns and requests from the general public and provides information and problem resolution as necessary. • Identifies and addresses both criminal and quality of life issues on assigned beat. • Officers work a 4 & 2 schedule. DE Officers switch days/evenings as the 4&2 rotation dictates. Midnight Officers work midnight shifts throughout the year. Certain Officers (generally two per shift) are "Late" Officers, reporting for shift assignment typically one hour after regular shift hours in order to provide overlapped coverage between shifts.
K-9 Officer	1	<ul style="list-style-type: none"> • Performs duties of Police Officers as described above. • Provides back-up to patrol officers, utilizes dog to conduct searches and tracking, narcotics stings, and participate in directed patrols, etc.
Court Officer	1	<ul style="list-style-type: none"> • Ensures security in municipal courtroom. • Assists civilian attendants with exterior security issues. • Assists court staff, municipal prosecutor and other officers in preparing cases for court, which is generally held four days per week.
COMMUNICATIONS BUREAU		

Budgeted Staffing by Classification		Key Roles and Responsibilities
	No.	
Lead Communications Operator	1	<ul style="list-style-type: none"> • Lead Communications Operator provides guidance to other Cos and coordinates training, and ensures that Cos understand new and revised general orders. • Answers questions from walk ups at the desk. • Receives complaints and 911 emergency calls. • Documents complaints in CAD or other means, and follows up on assignments and complaints. • Dispatches ambulances and Paramedics, as well as fire apparatus and Police personnel. • Operates radio communications. • Receives, logs and takes appropriate actions on telephone calls. • Reports unsecured buildings or enclosures to owners/managers. • Reports any serious injuries to the Sergeant on duty, or to others as directed. • Reports major crimes, or similar disturbance, or any procedural or operational defect to the Shift Sgt.. • Reports any Police incident involving the LTPD occurring outside the jurisdiction to the Sergeant on duty. • Enter arrests, perform statistical works, make NCIC entries, enter warrants, etc. • Communications Officers work a 4 & 2 schedule. DE Communications Officers switch days/evenings as the 4&2 rotation dictates. Midnight Communications Officers work midnight shifts throughout the year.
Communications Operator	8	
INVESTIGATIONS DIVISION		
Lieutenant	1	<ul style="list-style-type: none"> • Manager of the Investigations Division. • Reviews all incoming cases for assignment within the Division. Determines which cases should be assigned and which should be closed without further investigation. • Oversees the operations in the Division, ensuring compliance with general orders, policies and procedures. • Works with other Division commanders regarding on-going investigations. • Responds to citizen requests for information, or to other in the Department or Township leadership. • Coordinates with other jurisdictions and agencies sharing criminal investigations information. • Participates in weekly command staff meetings.

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Budgeted Staffing by Classification		Key Roles and Responsibilities
	No.	
Sergeant	1	<ul style="list-style-type: none"> Serves as supervisor for all Detectives and oversees operations of the Detective Unit. Handles a small caseload where the Sergeant serves as the primary investigator. These typically include cases requiring minimal follow up. Responsible for the generation of various reports regarding activities of the unit including case closure rates, status of investigations, etc. Responsible for assigning cases to individual Detectives and monitoring case progress. The Sergeant will make the final decision on when to close a case.
Detective	5	<ul style="list-style-type: none"> Detectives are generalist investigators, working general all crime types, while one Detective concentrates on juvenile cases. The Detectives work assigned cases. The Sergeant assigns all cases that are not misdemeanors. Misdemeanors are assigned back to Patrol. Detectives meet every morning with the Sergeant to discuss cases. Work hours are rotated between Detectives
Juvenile Detective	2	<ul style="list-style-type: none"> Investigate all crimes committed by and against juveniles occurring within the Township.
Property and Evidence Officer	1	<ul style="list-style-type: none"> Responsible for the logging, handling, and storing of all property entered into evidence by Police Officers. Processes evidence at major crime scenes. Ensures proper procedures are followed for maintaining custody and control of all evidence under control of the Lawrence Township Police Department. Ensures proper handling and documentation of evidence sent to outside labs. Trains Officers in handling crime scene processing.
Information Technology Officer	1	<ul style="list-style-type: none"> Responsible for overseeing and maintaining all information systems utilized by the Police Department. This includes CAD and RMS as well as other software.
RECORDS BUREAU		
Administrative Clerk	1	<ul style="list-style-type: none"> Prepares criminal cases for the Mercer County Prosecutor's Office. Records impounded vehicles into inventory.

Budgeted Staffing by Classification		Key Roles and Responsibilities
	No.	
Records Clerk	3	<ul style="list-style-type: none"> Responsible for the reviewing, processing, and / or inputting of incident crime reports, moving violation citations, traffic accident reports, evidence and property, and warrants. Responsible for reviewing incident crime reports and the intake, storage, and disposal of evidence and property Positions work a Monday through Friday schedule from 8:00 AM to 5:00 PM, and report directly to the Lieutenant position.
Total Positions	80	65 Sworn 15 Non-Sworn

As shown above, the Lawrence Township Police Department has an authorized total of 80 full-time positions including 65 sworn and 15 non-sworn.

3. KEY OPERATIONS AND PRIMARY WORKLOAD ACTIVITY

This section includes information regarding the primary services and annual workload activity for the LTPD, including the following:

- Field resource deployment
- Calls for service
- Follow-up investigation cases
- Other field / support workload

The workload activity provided in this section is based on CY 2010 data.

(1) Field Resource Deployment

This section provides illustrates the weekly deployment schedule of the current allocation of field personnel (as of January, 2011).

(1.1) Sergeant Field Deployment

Sergeants work a 4 and 2 rotation with three shifts per day. Sergeants on Day/Evening shifts rotate days and evenings each 4-day rotation. Sergeants on midnight shift stay on midnights throughout the year. The following shows the total number of sergeant positions deployed in the Lawrence Township on a 12-day cycle.

Day	DE-1	DE-2	DE-3
1	2 Day	2 Evening	
2	2 Day	2 Evening	
3	2 Day		2 Evening
4	2 Day		2 Evening
5		2 Day	2 Evening
6		2 Day	2 Evening
7	2 Evening	2 Day	
8	2 Evening	2 Day	
9	2 Evening		2 Day
10	2 Evening		2 Day
11		2 Evening	2 Day
12		2 Evening	2 Day

Note that a single Sergeant staffs the DE-3 rotation, with two Sergeants scheduled for the other two rotations.

(1.2) Field Patrol Deployment

Patrol Officers follow the same shift rotation as do the Sergeants. The following shows the total number of field patrol officers deployed in Lawrence Township on a 12-day rotation:

Day	DE-1	DE-2	DE-3
1	9 Day	9 Evening	
2	9 Day	9 Evening	
3	9 Day		9 Evening
4	9 Day		9 Evening
5		9 Day	9 Evening
6		9 Day	9 Evening
7	9 Evening	9 Day	
8	9 Evening	9 Day	
9	9 Evening		9 Day
10	9 Evening		9 Day
11		9 Evening	9 Day
12		9 Evening	9 Day

Note that the minimum staffing in Patrol is six (6) Police Officers, one (1) Sergeant and two (2) Communications Officers seven days per week, except during the hours of 3:00 am to 7:00 am, during which time the minimum staffing can be reduced to five (5) Police Officers.

(2) Calls for Service

This section identifies the number of community-generated calls for service and officer-initiated activity, which was developed through review of CAD / RMS data, discussions with dispatch personnel, and LTPD incident information.

(2.1) Community Generated Calls for Service

The table below identifies the number of calls for service having a unique incident number, a unit dispatch time, and / or a unit arrival time. These data were pulled from the electronic spreadsheet provided by the LTPD for 2010.

LTPD Community-Generated CFS – 2010

Hour	Sun	Mon	Tue	Wed	Thur	Fri	Sat	Total
0000	93	55	49	61	52	62	74	446
0100	66	33	38	42	33	44	61	317
0200	41	32	31	35	25	35	63	262
0300	35	24	30	29	29	37	45	229
0400	26	24	19	26	26	35	21	177
0500	28	30	19	31	22	25	34	189
0600	27	55	37	48	46	47	42	302
0700	41	96	94	100	74	97	60	562
0800	68	111	119	113	105	120	94	730
0900	83	119	113	112	108	94	84	713
1000	93	131	118	99	115	112	101	769
1100	101	113	95	132	130	106	109	786
1200	97	134	114	130	122	109	130	836
1300	95	140	108	134	137	127	136	877
1400	113	128	93	113	118	158	107	830
1500	129	173	150	167	135	175	174	1,103
1600	124	159	145	147	143	149	149	1,016
1700	113	135	152	148	166	147	121	982
1800	98	121	129	149	144	159	134	934
1900	101	119	132	136	126	158	123	895
2000	91	101	101	119	103	108	89	712
2100	93	95	96	89	92	123	113	701
2200	57	87	73	61	75	89	74	516
2300	66	54	64	73	67	96	87	507
Total	1,879	2,269	2,119	2,294	2,193	2,412	2,225	15,391
Pct.	12.2%	14.7%	13.8%	14.9%	14.2%	15.7%	14.5%	100.0%

As can be seen from the table, there were 15,391 unique community-generated calls for service in CY 2010. The greatest number of these calls occurred on Fridays, which accounted for 15.7% of all calls for service. The heaviest hour of the day for call volume is between 4:00 pm and 5:00 p.m.

(2.2) Incidents by Type

The following table provides the numbers of incidents by type in CY 2010, as well as the numbers of arrest.

Incident Type	Incidents	Arrests
Aggravated Assault	21	21
All Other Larceny	326	27
All Other Offenses	383	995
Arson	11	12
Bad Checks	38	1
Bribery	1	

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Burglary/B&E	168	39
Counterfeiting/Forgery	44	15
Credit Card/ATM	73	8
Destruction/Damage/Vandalism	239	43
Disorderly Conduct	10	31
DUI	1	110
Drug/Narcotics Violations	19	85
Drug Equipment Violations	11	44
Embezzlement	2	1
Extortion/Blackmail	2	
False Pretenses/Swindle/CO	107	25
Family Offenses, Nonviolent	15	20
Forcible Fondling	4	1
Forcible Rape	7	4
Impersonation	114	14
Intimidation	17	15
Kidnapping/Abduction	5	2
Liquor Law Violation	3	10
Motor Vehicle Theft	46	5
Prostitution	1	6
Robbery	19	15
Runaway	2	1
Shoplifting	113	424
Simple Assault	71	71
Statutory Rape	1	
Stolen Property Offenses	9	21
Theft from Building	14	
Theft from Coin-Operated Machine	1	
Theft from Motor Vehicle	31	4
Theft of Motor Vehicle Parts	9	
Traffic, Town By-Law Offenses	1	9
Trespass of Real Property	23	21
Weapon Law Violations	45	44
Wire Fraud	1	
Total Incidents	2,008	2,144

(3) Investigations Cases and Detective Deployment

From the 2010 Annual Report, it was determined that general assignment Detectives handled 667 cases in 2010 as compared to 569 in 2009. This represents an increase of 98 cases, or 17.2%. The clearance rate for cases handled by the general assignment Detectives was reportedly 39% in 2010, as compared to 40% in 2009. The two Juvenile Officers investigated 352 cases in 2010, compared to 262 in 2009, an increase of 90 cases, or 34.4%. These data are shown below:

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Detective	Assignment	Date of Report	Total Assigned (2010)	Open on Date of Report	Closed by Arrest
A	Juvenile	1/18/11	173	35	77
B	Juvenile	1/18/11	179	49	75
C	General	1/18/11	156	44	29
D	General	1/18/11	135	51	30
E	General	1/18/11	149	53	44
F ³	General	1/18/11	83	26	14
G	General	1/18/11	146	26	47

The distribution of caseload is relatively consistent across all Detectives in both Juvenile and General assignments. The project team conducted 'desk audits' with detectives to assess the level of active cases (those worked in the past 30 days) compared to open cases (which may include cases that have not been actively worked recently). The results of these desk audits was a significant reduction in active cases, as shown:

Detective	Assignment	Open on Date of Report
A	Juvenile	17
B	Juvenile	32
C	General	26
D	General	23
E	General	25
F	General	17
G	General	19

The generalist Detectives work a rotating 5-week schedule, depicted below:

	<u>Sunday</u>	<u>Monday</u>	<u>Tuesday</u>	<u>Wednes.</u>	<u>Thursday</u>	<u>Friday</u>	<u>Saturday</u>
D-1	RDO	1300 - 2300	1300 - 2300	1300 - 2300	RDO	1300 - 2300	RDO
D-2	RDO	0800 - 1800	0800 - 1800	RDO	0800 - 1800	0800 - 1800	RDO
D-3	RDO	0700 -	0700 -	0700 -	RDO	0700 -	RDO

³ This Detective was moved from SRO to generalist investigator in the summer of 2010, thus showing much lower productivity figures compared to the other Detectives assigned.

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		1700	1700	1700		1700	
D-4	RDO	0700 - 1700	0700 - 1700	0700 - 1700	0700 - 1700	RDO	RDO
D-5	RDO	RDO	RDO	1300 - 2300	1300 - 2300	1300 - 2300	1300 - 2300

This approach provides for evening coverage by at least one Detective six days per week. The bolded days (Monday through Tuesday in D-1 and Wednesday through Saturday in D-5) are those days on which that Detective is responsible for all after-hours calls – even on their RDO day of Sunday.

(4) Other Field / Support Workload

The following summarizes the FY 2009 and 2010 workloads for other key services indicating general LTPD personnel activity-levels.

- Traffic crashes were 1,564 in 2010 (299 involved injuries) and 1,447 in 2009.
- Officers Issued 8,338 traffic citations, in 2010 (about 23 per day), and 8,933 in 2009 (about 24.5 per day).
- Officers apprehended 107 intoxicated drivers in 2010 and 120 in 2009. Over 80% of these were on midnight shift.

APPENDIX B

COMPARATIVE SURVEY

The project team conducted a comparative survey. Though almost 10 surveys were distributed, we received responses from three communities. These are provided on the following pages.

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Municipality	Ewing	Lawrence	South Brunswick	West Windsor
Contact Name & Title			Raymond Hayducks, Chief of Police	Joseph, per the Chief
Square Mile of the Jurisdiction	15.13	22	42	27
Population	36,062	31,660	40,485	27,000
2011 Operating Budget	Unknown	\$261,000 (2010)	\$200,000	\$317,000
2011 Personal Services (Salaries & Benefits) Total		\$8,086,465 (2010)	\$8,200,042 (2010)	\$5,800,000
2011 Overtime Budget			\$125,000 (Sept. through Dec. compensatory time only due to Union Agreement; no OT)	\$189,000
2011 Operating and Maintenance Total		\$8,347,465	\$8,525,042	\$6,306,000
No. of Staff (FTEs) by Position Title				
Chief	1	1	1	1
Deputy Chief	0	1	1	0
Assistant Chief	0	0	0	0
Captain	0	1	2	0
Lieutenant	5	3	5	4
Sergeant	11	9	16	7
Detective	5	7	6	6

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Municipality	Ewing	Lawrence	South Brunswick	West Windsor
Patrol Officer	49	41	42	28
Dispatchers / Communicators	10	8	12	7
Records Clerk	2	2	4	4
Information Technology	1	1 (done by Police Officer)	0	0
Property and Evidence Clerk	(done by police officer)	1 (done by Police Officer)	0	0
Admin. Assistant / Secretary	3	2	6	1
Other:	1 Vehicle Maintenance 1 Firearms Instructor	1 Emergency Management Director		0
In what Divisions/functions does your Department utilize civilians (e.g., dispatch, records, information technology, investigations, etc.)?	9-1-1 Dispatchers, Records Clerk, I.T.	Dispatch, Records	Dispatch, Records and Administrative Assistants	7 Dispatchers 5 Civilian Records / Admin. Clerks
Does the Department utilize civilians to respond to low priority calls? Number of staff? Number of shifts? Percent of calls handled? What types of calls?	No	No	No, Department has online reports that are sent to civilians	No

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Municipality	Ewing	Lawrence	South Brunswick	West Windsor
For FY 2009 – 2010, what was the number of community-generated calls for service (i.e. excluding officer initiated calls for service)? How many 911 calls did your department take?	32,745 CFS 19,295 9-1-1	17,880 CFS 15,391 9-1-1	911 Calls: 2009- 20,926 2010- 22,549 CFS: 2009- 21,602 2010- 23,512 Ave. close to 50,000 calls with officer initiated calls.	2009 – 35,685 2010 – 37,291 Includes Officer generated calls.
Does your Department have a formal Community Policing Program? Is it part of Patrol or a separate designated unit? If it is its own unit, how many sworn staff are assigned to this function?	Community policing unit disbanded due to budget cuts; also disbanded citizen academy	No	Yes, separate program staffed with 1 sworn officer	Part of Patrol
Is there a Mall within your boundaries? If yes, are there officers or supervisors assigned to the mall as their primary duty?	No	Yes, one Sergeant	No	Nassau Park Shopping District 2 Officers assigned

Municipality	Ewing	Lawrence	South Brunswick	West Windsor
<p>Does the Department maintain a call prioritization system? What are response time targets by priority? Are these targets being met?</p>	<p>No</p>	<p>Yes – priorities 1 – 3 (where 1 is the most serious).</p>	<p>All calls are immediately dispatched. Patrol Sergeants decide the priority of each call as they are dispatched.</p>	<p>Emergency 1 – 4 minutes Non-Emergency 1 – 10 minutes Targets are met.</p>
<p>Please describe your patrol and dispatch schedules. How long is the patrol shift? How many teams/squads are assigned to a shift? How does the rotation work (e.g. 5 days worked out of 7, 4 on 2 off, etc.)?</p>	<p>10.5 Hour Patrol Schedule; work 24 days of 42 day cycle; 2080 hours per year Dispatch works 12 hour schedule</p>	<p>Day and Evening shifts rotate between days/evenings. Officers assigned to midnight shifts remain on this shift. Dispatchers work the same schedules. Some officers are assigned a “late” schedule, which provides limited overlapping coverage with the following shift. Officers and Dispatchers work a 4 and 2 rotation, 8-hours per day.</p>	<p>Patrol: Modified 3 on/3 off (3/3, 3/3, 2/3, 3/3, 3/2) Patrol: 10.5 hour shifts Patrol: 2 platoons (A side / B Side) with 3 squads (Mids, Days, Eves)</p>	<p>12 hour “pittman” schedule; 4 Squads (2 on, 2 off, 3 on, 2 off) Steady nights = 2 squads Steady days = 2 squads</p>

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Municipality	Ewing	Lawrence	South Brunswick	West Windsor
Does the Department have a 'minimum staffing' standard? If yes, what is it? Does it vary by shift?	1 Sergeant, 4 Police Officers	1 Sergeant, 6 Police Officers, 1 Dispatcher. This drops to 5 Police Officers from 3:00 am to 7:00 am.	Yes, 5 officers and 1 sergeant every shift	4 person minimum for Patrol
What schedule do Detectives work? Is there evening or night coverage? If yes, how is it provided?	9 hour schedule, every other Friday off. Discontinued weekend and PM staffing.	Generalist Detectives work a rotating 5-day schedule.	Investigations: 4 on/4 off, rotate Data to Evenings every other week	Detectives work M-F, 8.5 hour days; at least one works 1:30 PM to 10:00 PM
What is the estimated average active caseload of detectives for: <ul style="list-style-type: none"> • Person crimes • Property crimes 	185 assigned per Detective per year; 90 Persons 95 Property	18 active cases	Each detective averages a caseload of 12 – 15 cases per month	2 to 4 active cases at all times
What were the number of Part I crimes in 2009?	854	974	561	628
What was your clearance rate for Part I crimes in 2009? <ul style="list-style-type: none"> • Person crimes • Property crimes 	Unknown		Total: 31.6% Violent: 70.8% Non-Violent: 18.3% Simple Assaults: 65%	Crime Index – 549 Violent Crimes – 12 Non-Client Crimes – 537 Clearance – 250

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Municipality	Ewing	Lawrence	South Brunswick	West Windsor
How are victims with cases of low solvability handled?	Early case closure notified by Detective	Not assigned, or assigned to patrol for additional contact.	Victims receive a letter explaining that the case will not be assigned and why.	Same as all others
How are Records staff deployed (e.g., 24/7 or just M-D day shift)?	2 Civilian Clerks, M-F	2 Civilian Clerks, M-F from 8:00 am to 4:00 pm (Window open till 3:30 pm)	M – F Day shift	M-F, 9 AM to 5 PM
What was the number of reports processed last year?	8,690	5,348	4,414	2010 – 3,982
Number of staff assigned to property and evidence? How are they deployed (e.g., 24/7)? How many pieces of evidence booked last year?	1 Police Officer, M-F	1 Police Officer, M-F	1 Detective, 4 on / 3 off, Day shift Total Pieces: 1,153	2 Detectives as additional duty.
For the last three years, what was the Department's average turnover rate?	Lost 11 Officers to retirement (81-70)	For the 3 years, the LTPD lost 5 to retirement and 8 resignations (2 were Crossing Guards). In addition, there was 1 intergovernmental transfer and 2 deaths (one Crossing Guard and 1 Dispatcher).	4 new hires, 16 retired/resigned/transferred	2 per year due to retirement

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Municipality	Ewing	Lawrence	South Brunswick	West Windsor
Does the Department have any succession plans in place for supervisory positions? If yes, please describe.	No, have not replaced supervisors in last five years.	No	Yes	We utilize a testing process.