# Baltimore Police Department Staffing Study August 2018 

Final Draft v. 2

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## Executive Summary

## Introduction

Over time, the Baltimore Police Department (BPD) has faced staffing challenges and troubling rates of violence and crime, along with significant mistrust from the community. Spending millions of dollars on overtime and facing internal morale issues due to regular drafting, coupled with recent turnover changes in leadership, the department needs major reform in the policies and practices associated with patrol staffing as it relates to the delivery of police services to the community.

This staffing study provides an evidence-based review of the patrol function of the BPD, as well as some of the investigative and support functions of the department. The conclusions reached were informed by data provided by BPD and work done by the Police Foundation (PF) team to organize and verify the data. In some instances, the available data was insufficient to complete an accurate and reliable analysis.

With Baltimore Police Department under a Federal Consent Decree, many of the needed changes are underway, with many focused on transforming BPD's accountability, transparency, community policing, and culture. Key to the success of these reforms and changes required under the consent decree is a realistic and appropriate staffing plan. The plan will be necessary to carry out the work of department and of the reform efforts. Areas such as Patrol, the Police Academy, the Office of Professional Standards, and the Information Technology Section will be directly impacted by required changes, which will cascade throughout the department. It is imperative that these be monitored closely by decision makers as the department is transformed.

## Key Findings

## Data Collection

BPD must work to better collect accurate data in all areas of the department for a more comprehensive and accurate analysis of staffing and organizational efficiencies. This requires a thoughtful approach to developing data management systems in the department that capture, validate, and store data that can be more easily trusted, organized, and analyzed.

## Patrol

The BPD staffing charts for each of the nine districts from December 2017 show that a total of 1,102 police officer positions are budgeted for sector patrol. However, only 809 of those positions are filled.

Table 1 below is a copy of Table 14 from the patrol analysis section of this report. It shows the number of officers required to serve the City of Baltimore, according to the workload analysis.

Table 1: Recommended Dedicated Patrol Staffing Requirements

| District | Average Rate <br> Available <br> for Patrol <br> Duties of <br> Police <br> Officers <br> Assigned <br> to Sector <br> Patrol ${ }^{1}$ | Average <br> Hours <br> Available <br> for Patrol <br> Duties <br> per <br> Officer <br> per <br> Week ${ }^{2}$ | Breaks and <br> Shift <br> Change per Week ${ }^{3}$ | Average Hours <br> Available for Patrol Duties per Officer per Week After Breaks and Shift Change ${ }^{4}$ | Average <br> CFS <br> Hours in the District per Week ${ }^{5}$ | Officers <br> Needed if <br> 60 percent of Time is Spent on Calls for Service (40 percent for COP, SI and commander assigned) ${ }^{6}$ | Actual Officers Currently Assigned to Sector Patrol ${ }^{7}$ | Budgeted Officers for Sector Patrol ${ }^{8}$ | Percentage Difference <br> Between <br> Budgeted and <br> Needed if $60 \%$ of Time is Spent on Calls for Service ${ }^{9}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Central | 76.190\% | 30.48 | 5.33 | 25.14 | 1155.6 | 77 | 76 | 114 | 33\% |
| Eastern* | 77.392\% | 30.96 | 5.33 | 25.62 | 1280.2 | 83 | 91 | 112 | 26\% |
| Northeastern | 75.619\% | 30.25 | 5.33 | 24.91 | 2063.9 | 138 | 109 | 160 | 14\% |
| Northern | 71.917\% | 28.77 | 5.33 | 23.43 | 1572.1 | 112 | 78 | 123 | 9\% |
| Northwestern* | 74.569\% | 29.83 | 5.33 | 24.49 | 1433.6 | 98 | 85 | 114 | 14\% |
| Southeastern | 70.837\% | 28.33 | 5.33 | 23.00 | 1596.9 | 116 | 95 | 116 | 0\% |
| Southern | 74.889\% | 29.96 | 5.33 | 24.62 | 1507.4 | 102 | 83 | 125 | 18\% |
| Southwestern | 73.659\% | 29.46 | 5.33 | 24.13 | 1592.9 | 110 | 98 | 121 | 9\% |
| Western | 77.687\% | 31.07 | 5.33 | 25.74 | 1160.8 | 75 | 94 | 117 | 36\% |
| Citywide* | 74.850\% | 29.94 | 5.33 | 24.61 | 13363.4 | 910 | 809 | 1,102 | 17\% |

*Note: Eastern and Northwestern district average rates of time available for patrol were edited down to reflect the rates that would have occurred had officers attended their full 80 hours of in-service training.
*Note: The Citywide total reflects the edited district average rates of time available for patrol.
Sources: BPD Computer Aided Dispatch data, July 1, 2016-June 30, 2017; BPD payroll leave data, January 1, 2017-
December 31, 2017; and lists of officers and their rank who were assigned to each district in January 2017 and December 2017.
${ }^{1}$ BPD payroll leave data, January 1, 2017-December 31, 2017; and lists of officers and their rank who were assigned to each district in January 2017 and December 2017. Source tables for these rates are available in Appendix 13.7.
${ }^{2} 40$ hours of work per week $x$ each district's average rate available for patrol duties of police officers assigned to sector patrol.
${ }^{3}$ Eighty minutes of officer time per shift for breaks and shift change = Approximately 5.33 hours per week per officer that they are additionally unavailable for patrol duties.
${ }^{4}$ Average Hours Available for Patrol Duties per Officer per Week - Breaks and Shift Change per Week. Numbers shown have been rounded to the nearest hundredth decimal place.
${ }^{5}$ BPD Computer Aided Dispatch data, July 1, 2016-June 30, 2017. The Citywide number is shown as to provide a sum of the average CFS hours from each district and not the overall city average.
${ }^{6}$ (Average CFS Hours in the District per Week / Average Hours Available for Patrol Duties per Officer per Week After Breaks and Shift Change) / 60 percent.
${ }^{7}$ December 2017 staffing charts for each district. As actual counts of officers assigned can vary over time, in August these numbers were checked against BPD's "Patrol Strength Report 8-9-18" for general consistency.
${ }^{8} \mathrm{Ibid}$.
${ }^{9}$ (Budgeted Officers for Sector Patrol - calculated Officers Needed if 60 percent of Time is Spent on Calls for Service) / Budgeted Officers for Sector Patrol.
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This analysis reveals that the BPD has sufficient budgeted police officer positions to meet the needs of community calls for service and allows for sufficient available time to conduct selfinitiated activity and work with the community to problem solve neighborhood issues.

However, the analysis also shows that while budgeted positions are adequate, the number of filled and assigned positions does not meet the needs of the department and community. To compensate for the lack of police officers assigned to sector patrol, the BPD uses overtime and drafting to fill vacancies.

The vacancy rate for police officers assigned to BPD sector patrol is 26.6 percent while police officer vacancies for the rest of the department is under 2 percent. The vacancy rates for police officers indicates that BPD appears to give the least importance and value to patrol services when it comes to filling vacancy. The practice of carrying vacancies in patrol and assigning police officers to non-patrol duties has been a leadership decision that has not and does not best serve the BPD or the Baltimore community.

To improve patrol response and community engagement, the following recommendations are offered:

- Fill budgeted police officer positions in sector patrol to the at least the recommended 910. This will reduce the police officer vacancy rate in sector patrol to approximately 17 percent.
o Prioritize the police officer role by committing to functional staffing of 910 officers assigned to sector patrol. This requires that BPD discontinue the practice of using police officers for non-patrol duties;
o Smooth department vacancies so that sector patrol is not carrying more than the rest of the department;
o Revise decisions, policies and protocols that have required pulling police officers off patrol duties and away from calls for service, opting instead for alternative policies that use resources from elsewhere;
o Identify and civilianize positions for administrative functions;
- Employ technology that will stream-line processes and improve efficiencies so that police officers can be freed up to focus on community-facing, crime fighting, and problem-solving activities;
- Identify and implement innovative ways to reduce necessary response to calls for service; and
- Study ways in which the department's organizational structure, historically unstable leadership, span of control, and decision-making processes impact officer morale, efficiency, and culture.


## Investigations

A full analysis was not possible due to lack of available data. The BPD should work to collect data that will enable a thorough staffing analysis based on workload and identify ways to create efficiencies in all investigative sections and units.

These sections will be profoundly impacted by the requirements of the consent decree and as such should be prioritized (with regard to staffing) to ensure that they can meet the needs of reform efforts.

## Civilianization

Only 13.6 percent of BPD's staff are civilians, lower than many agencies across the country. When the crime laboratory staff (primarily civilian) are removed to compare with like agencies without laboratory responsibilities, BPD's civilian rate falls to approximately 10 percent. Increased civilianization in police departments brings myriad benefits to organizational efficiency, cost effectiveness, culture, and professionalism. Based on this, the BPD should prioritize conducting a formal, comprehensive civilianization study that reviews the business processes and detailed tasks required of each sworn officer in the department. This should inform a plan that prioritizes creating civilian positions in the department to complete tasks that do not require arrest powers. In short term, BPD should use the civilianization study conducted in 2017 by BPD to identify positions that could be filled with civilian personnel.

## 1 Introduction

### 1.1 Background

Staffing at the Baltimore Police Department (BPD) has been challenged over the last several years, with attrition often outpacing hiring, despite initiatives to attract officers. With approximately 2,526 sworn officers and 430 civilian personnel in 2017, the department is funded for hundreds more (3,128 total). ${ }^{10}$

The below table shows BPD actual vs. budgeted and funded staffing from 2013-2017 according to BPD records.

Table 2: BPD Staffing Actual vs. Budgeted \& Funded Comparison

|  | 2013 | 2014 | 2015 | 2016 | 2017 |
| :---: | ---: | ---: | ---: | ---: | ---: |
| Total Budgeted Positions |  |  |  | $\mathbf{3 , 3 4 5}$ | $\mathbf{3 , 3 5 4}$ |
| Sworn Budgeted |  |  |  | 2,850 | 2,846 |
| Police Officers |  |  |  | 2,346 | 2,342 |
| Other |  |  |  | 504 | 504 |
| Civilian Budgeted |  |  |  | 495 | 508 |
| Total Funded Positions | $\mathbf{3 , 4 3 8}$ | $\mathbf{3 , 2 3 6}$ | $\mathbf{3 , 2 4 0}$ | $\mathbf{3 , 1 2 0}$ | $\mathbf{3 , 1 2 8}$ |
| Sworn Funded | 3,080 | 2,871 | 2,863 | 2,625 | 2,621 |
| Police Officers | 2,554 | 2,349 | 2,351 | 2,121 | 2,117 |
| Other | 526 | 522 | 512 | 504 | 504 |
| Civilian Funded | 358 | 365 | 377 | 495 | 507 |
| Total Actual Filled Positions | $\mathbf{3 , 1 5 4}$ | $\mathbf{3 , 0 9 6}$ | $\mathbf{2 , 9 4 8}$ | $\mathbf{2 , 9 1 6}$ | $\mathbf{2 , 9 5 6}$ |
| Sworn Actual | 2,858 | 2,805 | 2,634 | 2,517 | 2,526 |
| Police Officers | 2,356 | 2,321 | 2,142 | 2,022 | 2,026 |
| Other | 502 | 484 | 492 | 495 | 500 |
| Civilian Actual | 296 | $\mathbf{2 9 1}$ | 314 | 399 | 430 |
| Total Staffing Difference <br> between Budgeted and <br> Actual | $\mathbf{N / A}$ | $\mathbf{N} / \mathbf{A}$ | $\mathbf{N} / \mathbf{A}$ | $\mathbf{4 2 9}$ | $\mathbf{3 9 8}$ |
| Total Staffing Difference <br> between Funded and Actual | $\mathbf{2 8 4}$ | $\mathbf{1 4 0}$ | $\mathbf{2 9 2}$ | $\mathbf{2 0 4}$ | $\mathbf{1 7 2}$ |

Note: Police Officers (PO) refer to all operational and administrative PO positions in the department and does not indicate whether the officer is assigned to patrol in a district, is an administrative officer or serves some other role within the department.
Note: Sworn 'Other' refers to other sworn members such as sergeants, lieutenants, captains, and other sworn positions that are not 'police officer.'

[^0]Note: The funded number are those that the city actually provided funding for and does include frozen positions. Therefore, the 'budgeted' number of positions is higher than the 'funded' strength.
Note: Authorized = the number of positions budgeted and authorized for filling with staff. Actual = positions filled with actual personnel hired and filling that position.
Sources: Baltimore Police Department. (2018). BPD end of year reports 2013-2018. Provided to PF team by BPD via email June 18, 2018. Data provided for December 31, 2017; December 29, 2016; December 28, 2015; December 22, 2014; and December 31, 2013. Data Source: Baltimore Police Department Strength Reports: 2013-2017 sent via Chief O'Dell to Shannon Sullivan via email to the PF team on June 18, 2018.

Figure 1: BPD Staffing Actual vs. Funded Comparison
BPD Staffing Actual vs. Funded




Note: The graph reflects actual and funded positions for the combination of both sworn and civilian. Source: BPD end of year reports 2013-2018.

Table 3: Fluctuations in Funded Positions

|  | $2013-14$ | $2014-15$ | $2015-16$ | 2016-17 |
| :--- | ---: | ---: | ---: | ---: |
| Change in total number <br> of funded positions | $\mathbf{- 2 0 2}$ | $\mathbf{+ 4}$ | $\mathbf{- 1 2 0}$ | $\mathbf{+ 8}$ |
| Percentage change | $-6.24 \%$ | $+0.12 \%$ | $-3.85 \%$ | $+0.26 \%$ |

Source: BPD end of year reports 2013-2018.

Fluctuations in funded staffing levels, fueled by budgetary freezes and leadership instability (and thus in organizational structure), has contributed to a negative impact on the department and on the service provided to the Baltimore community. BPD has seen regular shortages in reaching its patrol staffing 'minimum' ${ }^{11}$ over the years, leading to leadership decisions to mitigate these deficiencies through strategies such as overtime and drafting. Frequent drafting-requiring officers to work overtime-to fill shifts or cover special events is a norm according to BPD staff. With typical 10-hour shifts and regular drafting of multiple officers on a shift, the staff shortages and extended shift lengths cost millions, drive internal morale issues, and reduce the amount of community policing and engagement that Baltimore police officers are able to conduct. This, in addition to budget, low salaries (as compared to other major cities), and other issues, inhibit BPD's ability to consistently recruit and retain quality police officers.

### 1.1.1 City of Baltimore Crime Trends

Baltimore City struggles with one of the highest violent crime rates in the country. In 2017, Baltimore had 343 homicides-its third year in a row with more than 300 , and it's second most in a single year. ${ }^{12}$ Overall violent crime was in decline from 2012 through 2014 but rose in 2015 and 2016, with increases in homicide, rape, robbery, and aggravated assault.

Table 4: City of Baltimore Violent Crime by Offense Type and Year as Reported to the UCR

| Year | Violent <br> Crime <br> Total | Murder and <br> non-negligent <br> man-slaughter | Rape <br> (revised <br> definition) | Rape <br> (legacy <br> definition) | Robbery | Aggravated <br> assault |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 2016 | 11,010 | 318 | 299 |  | 5,236 | 5,157 |
| 2015 | 9,542 | 344 | 287 |  | 4,313 | 4,598 |
| 2014 | 8,346 | 211 |  | 245 | 3,677 | 4,213 |
| 2013 | 8,725 | 233 |  | 298 | 3,734 | 4,460 |
| 2012 | 8,789 | 218 |  | 315 | 3,605 | 4,651 |

Note: These numbers may differ slightly from BPD counts that have been updated since submission of crime data to the FBI's UCR as crimes have been reclassified.
Source: Federal Bureau of Investigation numbers retrieved from https://ucr.fbi.gov/crime-in-the-u.s.

Table 5: City of Baltimore Property Crime by Offense Type and Year as Reported to the UCR

| Year | Property <br> Crime | Burglary | Larceny- <br> Theft | Motor <br> Vehicle Theft | Arson |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 2016 | 29,547 | 7,375 | 16,855 | 5,317 | 259 |

[^1]| 2015 | 30,941 | 7,757 | 17,658 | 5,526 | 260 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 2014 | 29,420 | 6,926 | 18,008 | 4,486 | 213 |
| 2013 | 30,789 | 7,391 | 18,946 | 4,452 | 277 |
| 2012 | 29,149 | 7,770 | 17,397 | 3,982 | 242 |

Note: These numbers may differ slightly from BPD counts that have been updated since submission of crime data to the FBI's UCR as crimes have been reclassified.
Source: Federal Bureau of Investigation numbers retrieved from https://ucr.fbi.gov/crime-in-the-u.s.

Police Foundation research did not identify empirical research that shows a definitive correlation between high numbers of police officers and low crime rates. Some studies suggest that increasing police staffing is not a cost-effective way to cut crime. ${ }^{13}$ Others suggest that high crime-to-cop ratios may negatively impact police officer productivity. ${ }^{14}$ Studies on crime to police staffing ratios report various inconsistent findings, however, staffing analyses can indicate staffing levels needed to sufficiently handle workload and to appropriately serve the city.

### 1.1.2 Baltimore Police Under Consent Decree ${ }^{15}$

In 2016, the U.S. Department of Justice (DOJ) Civil Rights Division investigated the practices of BPD and released a report of its findings. Among other areas, the report found that BPD failed to "adequately support its officers with adequate staffing" and that BPD "lacks effective strategies for staffing, recruitment and retention, leading to officers working with deteriorated decision-making skills." ${ }^{16}$

On April 7, 2017, the City of Baltimore and DOJ entered into a consent decree that would address the issues identified in the findings report. The consent decree requires reform in a multitude of areas including, but not limited to community policing, impartial policing, misconduct, accountability, technology upgrades and staffing. ${ }^{17}$

This staffing study applies specifically to Paragraph 428, of Case 1:17-cv-00099-JKB, Document 2-2: Consent Decree, which reads:
"BPD will complete a comprehensive staffing study to assess the appropriate number of sworn and civilian personnel to perform the functions necessary for BPD to fulfill its mission, enable supervision, and satisfy the requirements of this Agreement." ${ }^{18}$

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This study is a necessary first step for BPD and the City to develop a staffing plan, mandated by the Consent Decree in paragraphs 429-430, which reads:
" 429 . Based upon the staffing study, BPD will develop a Staffing Plan that provides for each of the following:

1. Personnel deployment to ensure effective community and problem-oriented policing;
2. Sufficient number of well-trained staff and resources to conduct timely misconduct investigations;
3. Sufficient number of officers in patrol in each district, without needing to resort to drafting, except in unforeseeable circumstances;
4. To the extent feasible, Unity of Command;
5. Sufficient number of supervisors; and
6. The BPD's and the City's existing and projected resources.
7. BPD will implement the Staffing Plan and may do so in a phased manner that reflects the City's and BPD's fiscal resources." ${ }^{19}$

While this staffing study directly applies to Paragraph 428, many other requirements of the consent decree will impact BPD staffing as reform requirements are implemented. For example, improved recruitment and hiring efforts will require additional staff to undertake associated processes, as will increased training requirements for officers. Increased accountability through improved investigation of citizen complaints, as well as Office of Professional Responsibility (OPR) protocols, will impact necessary staffing. Improvement in transparency, assessment, and evidence-based decision making at BPD will also impact staffing and how the department captures and evaluates data. Likewise, improvements in BPD's data management and information technology systems will require qualified staffing to implement, manage, and sustain these reforms. ${ }^{20}$

All of these changes must be continually evaluated and considered while developing and implementing the forthcoming BPD staffing plan. For the City of Baltimore, the requirements of the consent decree are important considerations for better resourcing BPD.

### 1.2 The Purpose of This Study

The purpose of this study is to provide the BPD and the City of Baltimore with an analysis of historical Baltimore data, as it pertains to workload and staffing, in comparison with national best practices. The study also considers input from BPD officers and community members on staffing and service expectations. Finally, the purpose of the study is to provide evidence-based

[^3]staffing recommendations to meet those expectations and enable BPD leadership to meet the demands of the 2017 consent decree. The data analysis and recommendations in this report should contribute to defining the City of Baltimore and BPD's staffing priorities and for staffing the department to meet the $21^{\text {st }}$ Century policing challenges.

The shift in organizational leadership and structure during the study period has complicated tasks associated with studying staffing needs at the department. This staffing study, with support from the Police Foundation (PF), is intended to provide BPD leaders and stakeholders with an evidence-based study of some of the necessary variables to address staffing needs. These include a workload analysis, department policy review, community expectation survey, and discussion of a focus group of department staff, consideration of the departments mission and goals, and requirements of the consent decree. Taken in totality, while also accounting for City budget and recruitment and training limitations, the report is designed to inform Baltimore City decision makers in their efforts to create a thoughtful long-term staffing plan that will build a stronger, more professional BPD.

### 1.3 BPD Staffing Study Methodology

### 1.3.1 Police Agency Staffing Study Methodology Best Practices

Determining police department staffing is a complex endeavor. Besides ensuring consideration of the unique characteristics of a specific jurisdiction, many other variables should be considered to make accurate staffing decisions. According to an International City/County Management Association (ICMA) Center for Public Safety Management report outlining staffing study best practices in police departments, variables to be considered include, "...crime rates, job tasks and type of calls, officer to population ratios, mandatory minimums, collective bargaining minimums, shift distribution, supervisory placement, command-staff need, response time, call volume, organizational capability, public pressure, geography, and communitypolicing style." ${ }^{21}$ In addition, for a department to continue to build strong relationships with its citizens, measures such as community trust, perception of crime and safety, and amount of proactive community policing and engagement time required for officers should also be considered.

Various staffing methodology models exist and are used by police departments across the United States. The ICMA report mentioned above describes staffing models based on crime rate; pre-determined minimum staffing numbers or 'constants'; per capita or population-based; and budget availability. However, the report describes a staffing model based on workload analysis as a preferred approach to other methods.
"Lastly, and least common, are staffing decisions made on actual workload.
ICMA is a strong advocate of this approach, as it relies on actual levels of

[^4]demand for police services and matches that demand with the supply of police resources. Typically, this approach relies on an examination of calls for service received by a department, and these calls are modeled to understand demand and supply." ${ }^{22}$

While the workload analysis is limited by the fact that it relies solely on calls for service data, it can be augmented by using other data analysis to bolster it, and "offers the most accurate and reliable predictor of police staffing levels." ${ }^{23}$

### 1.3.2 General Methodology Used for BPD Staffing Study

In 2017, the BPD Compliance Unit asked the Police Foundation (PF) to conduct the staffing study. PF staff formed a team of subject matter experts in policing policies, procedures and practices; staffing data analysis; and police organizations to conduct the study, and the team began work. They conducted six site visits and countless conference calls, meeting with BPD personnel across all divisions to discuss work processes, staffing, and workload. They conducted off-site materials collection and review of policies, general orders, unit rosters and procedures, and other operational material.

The PF team also worked with various units to collect data on calls for service, staffing, workload, and more. The team designed analysis models and spent hours cleaning, organizing, and sorting data. From this data, the team conducted necessary analysis and created tables and data visualizations for inclusion in this report. Recommendations included in the report are based on data analyses, understanding of law enforcement and BPD operations, subject matter expertise, and national best practices.

Each analysis section in this report contains detailed methodology information, and a full-length methodology can be found in Appendix 13.2 of this report.

### 1.3.3 Data Challenges and Assumptions in Developing this Study

When developing a staffing study, departmental workload data (such as calls for service) and staffing data (personnel and payroll data) lies at the core of the analysis performed. However, comprehensive, accurate, and transparent data collection cannot always be assumed. In this case, the PF team requested data from a number of sources, including the BPD CAD system, payroll/fiscal data and staffing logs, charts, and other relevant documentation.

While some BPD data is collected into a common electronic data system, such as a computer aided dispatch (CAD) system or records management system (RMS) and were provided by BPD

[^5]via .cvs or .xls file, other data are currently being collected via hand-written reports and logs by BPD staff. This creates time consuming and tedious work to aggregate information and identify trends.

In addition, some of the data collected through data systems could not be validated in the study period, meaning it can often be miscoded or input in an unstandardized or inaccurate way without an automated process to preclude errors. Because of this, PF data analysts were required to clean and reorganize data so that data sets used for analysis represent the most reliable, consistent, and accurate information available.

Finally, because it is collected using business processes and systems that are not standardized across the department-where it is not captured in a consistent manner-data fields may be nuanced, counted differently, or called disparate titles. This leaves an inability to make an 'apples to apples' comparisons and identify trends over time. Many of these BPD data and information issues are described in more detail in the BPD Technology Resource Study which was submitted to the Court in June 2018.

Where possible, the PF team has assumed that police officers and other departmental personnel adhere to department policy and standard operating procedures. As an example, the team assumes that police officers assigned to patrol appropriately record their time and activity during their patrol shifts either in their Mobile Data Computers (MDCs) or by communicating it to the communications staff, and that it is properly entered into the CAD system. However, conversations throughout this staffing study process provide anecdotal evidence that this is not always an accurate and appropriate assumption.

## 2 The City of Baltimore

### 2.1 Geography, Population Trends, \& Characteristics

Baltimore City is located in north-central Maryland and is bordered by Baltimore County, Patapsco River, and Anne Arundel County. ${ }^{24}$ Encompassing 80 square miles, the City includes more than 280 distinctive residential neighborhoods and 13 colleges and universities, including Johns Hopkins University, Morgan State University, and the University of Maryland Baltimore. ${ }^{25}$

Figure 2: Map of Baltimore City Neighborhood Boundaries

[^6]

Source: City of Baltimore. (n.d.). 2010 Neighborhood Boundaries. Retrieved from http://cityview.baltimorecity.gov/maps/\#/map/74d9786c1cb946fb89c8873cc37a0e04

The City of Baltimore is largest city in the State of Maryland with a population of approximately 614,664 people ${ }^{26}$ residing in more than 280 distinctive residential neighborhoods, covering 80 square miles. The City is also home to and 13 colleges and universities, including Johns Hopkins University, Morgan State University, and the University of Maryland Baltimore. ${ }^{27}$ It is also home to historical landmarks such as Fort McHenry, the birthplace of the Star-Spangled Banner, and the B\&O Railroad, the country's first commercial rail line.

Despite possessing vibrant communities and cultural institutions, the City struggles to retain residents. The population count for August 2015-July 2016 represents a decrease of a more than 1 percent over 12 months and mark the nearing of a 100-year population low. ${ }^{28}$ At the same time, the population of the State of Maryland has grown overall from 5.77 million

[^7]residents in the 2010 Census to over 6 million in $2015 .{ }^{29}$ Over the last few years, after decades of declines, Baltimore's economy has improved, with property wealth growing twice the rate of the rest of the State. However, many of Baltimore's poorest neighborhoods have yet to feel the growth. ${ }^{30}$ Approximately twenty-two (21.8\%) percent of the Baltimore City population lives in poverty, far higher than the 12.7 percent nationwide. ${ }^{31}$

According to 2016 Census estimates, 63.3 percent of the City population is black or African American alone compared to 13.3 percent nationwide. 31.4 percent of the City population is white, compared to 76.9 percent nationwide, and 5.1 percent of the City population is Hispanic or Latino, compared to 17.8 percent nationwide. ${ }^{32}$ At the same time, Baltimore has a long history of racial inequality and tension, particularly with its black residents. From the early $20^{\text {th }}$ century on, City residents fought to overturn local Jim Crow laws and integrate local schools and public areas. ${ }^{33}$ From 1951 to 1971, 80 to 90 percent of the 25,000 residents that were displaced to build new highways, schools, and housing projects in the City were predominantly black. ${ }^{34}$

### 2.2 Crime Trends

Table 4 and Table 5 of this report in Chapter 1.1.1 provide historical UCR Part I crime data for the City of Baltimore.

Baltimore City struggles with one of the highest violent crime rates in the country. Violent crime-including homicide, rape, robbery, and aggravated assault-appeared in decline from 2012 to 2014 but rose in 2015 and 2016; the biggest increases were in homicides, shootings, and robberies. ${ }^{35}$ In 2014, Baltimore had a violent crime rate of 1,338.54 per 100,000 people, lower than Memphis' $1,740.51$ but higher than other cities similarly sized like DC, Boston, Nashville, and Oklahoma City, and with a higher homicide rate than each of these cities including Memphis. ${ }^{36}$ In 2017, Baltimore had 343 homicides-it's third year in a row with more

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than 300 and its second most in a single year, ${ }^{37}$ giving it the highest per capita homicide rate among the 50 largest U.S. cities. ${ }^{38}$

### 2.3 City Government

Baltimore City is an independent city governed by a Mayor and City Council. Elected by Baltimore voters to 4 -year terms, the Mayor is the chief executive officer of the City, overseeing the execution of ordinances and resolutions and supervising municipal officers and agencies. ${ }^{39}$ The Mayor oversees several city departments including the Baltimore Police Department.

The Baltimore City Council has 14 members, each representing a city district, and a City Council President. ${ }^{40}$ The Mayor and City Council have the power to pass all city ordinances and resolutions. ${ }^{41}$ The Mayor has the sole power of appointment for municipal officers with confirmation by majority vote of the City Council. ${ }^{42}$

An organizational chart of the Baltimore City Executive Branch is displayed in Figure 3.


[^9]Figure 3: City of Baltimore Organizational Chart


Source: Baltimore City Department of Legislative Reference. (2018, August 8). Charter of Baltimore City. Retrieved from
https://msa.maryland.gov/msa/mdmanual/36loc/bcity/pdf/bcity.pdf

### 2.4 Baltimore Police Department

The Baltimore Police Department (BPD) has served as the primary law enforcement agency for the City of Baltimore since $1784 .{ }^{43}$ Staffed by almost 3,100 sworn and civilian personnel, BPD is the $8^{\text {th }}$ largest municipal police department in the U.S. ${ }^{44}$ BPD is currently organized into three geographical areas comprised of nine districts, including Area 1 (Central, Northern, and Northwestern), Area 2 (Eastern, Northeastern, Southeastern), and Area 3 (Southern, Southwestern, Western). ${ }^{45}$

[^10]
### 2.4.1 Department Vision, Values, Mission and Goals

The mission and associated value statement of BPD is:
"The Baltimore Police Department is dedicated to upholding the Constitution and enforcing laws in a fair, impartial and ethical manner. We commit to creating and maintaining a culture of service that builds trust and legitimacy in all communities, values the sanctity of human life, and provides for the safety and well-being of all." ${ }^{46}$

The BPD mission is bolstered by nine core values:

- Accountability
- Community Collaboration
- Diversity and Inclusion
- Innovation
- Integrity
- Public Safety
- Safety and Wellness
- Service
- Trust and Respect ${ }^{47}$


### 2.4.2 BPD Leadership \& Organization

BPD has undergone organizational changes over the last several years. On January 19, 2018, Mayor Catherine Pugh appointed Darryl De Sousa as BPD's ninth police commissioner since $1994 .{ }^{48}$ In May 2018, Gary Tuggle became and is currently serving as interim police commissioner. The City is conducting a national search for a new police commissioner.

Under the oversight of the commissioner are the Operations and the Strategic Investigations and Support Services Bureaus. The Operations Bureau consists of the Neighborhood Patrol Division; the Special Operations Division; the Criminal Investigation Division, which includes all investigative units; and the Homeland Security Division, which includes communication, records and research, CitiWatch, building security, and information technology.

The Strategic Investigations and Support Services Bureau consists of the Youth and Community Division; the Office of Professional Responsibility; the Science and Management Services Division, which includes crime scene sciences and evidence control, the crime laboratory, medical, asset management, human resources, and the body-worn camera unit; Fiscal Services;

[^11]the Recruitment and Officer Wellness Division; and the Inspectional Services and Integrity Division.

The Office of Constitutional and Impartial Policing, Legal Affairs, Consent Decree Implementation, Strategic Communications, and Chief of Staff report directly to the commissioner. ${ }^{49}$

With each change in leadership, corresponding changes in organizational structure also occur. This has happened so frequently at BPD, that the resulting instability is felt at every level of the department, hampering consistent focus and decision making on critical department issues.

Figure 4: Baltimore Police Department Organizational Chart


Source: Baltimore Police Department. (2018, May 15). Baltimore Police Department Organizational Chart. Retrieved from
https://www.baltimorepolice.org/sites/default/files/General\ Website\ PDFs/BPDOrgChart.pdf

### 2.4.3 Description of Police Districts

Policing across Baltimore City is geographically divided into nine patrol districts. Each district is led by a major and a captain. Figure 5 shows a map of BPD's current patrol districts.

[^12]Figure 5: Baltimore Police Department District Map


Source: Baltimore Police Department. (n.d.) "Districts." Retrieved from https://www.baltimorepolice.org/districts/find-my-district

Central District includes downtown and the University of Maryland, Baltimore, as well as Inner Harbor, Mount Vernon, Lexington Market, Maryland Science Center, National Aquarium, and many restaurants. ${ }^{50}$ One of the most culturally diverse, Southeastern District is home to many Hispanic immigrants in Baltimore and is part of the Port of Baltimore, one of the oldest ports in the U.S. at over 300 years old. ${ }^{51}$ The smallest of the nine districts in size, Eastern District includes the Johns Hopkins Medical Campus. ${ }^{52}$ The largest of the nine districts in size, Northeastern District, is home to Morgan State University, Good Samaritan Hospital, Clifton Park Public Golf Course, Mt. Pleasant Public Golf Course, Lake Montebello, and Stadium Place. ${ }^{53}$ Northern District includes some of the most affluent Baltimore neighborhoods, the Maryland Zoo, Johns Hopkins University Homewood Campus, Loyola University Maryland, and the Notre Dame of Maryland University. ${ }^{54}$ Northwestern District has a diverse makeup of communities including the second-largest Orthodox Jewish community in the country. The district is home to

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the Pimlico Race Course. ${ }^{55}$ Western District has several historic neighborhoods and includes the University of Maryland's Biotech Campus and Coppin State University. ${ }^{56}$ Southwestern District is home to a variety of communities as well as the Gwynns Falls Trail and Leakin Park, together comprising more than 1,000 acres. ${ }^{57}$ M\&T Bank Stadium and Camden Yards, are in the Southern District which is known for its rich history as home to Fort McHenry and the location of the birth of the Star Spangled Banner. ${ }^{58}$ Table 6 displays demographics for each district based on a BPD compilation of 2014 U.S. Census Bureau totals.

Table 6: City of Baltimore Demographics by Police District, 2014
$\left.\begin{array}{|l|l|l|l|l|l|l|l|l|}\hline & & & \begin{array}{l}\text { Black or } \\ \text { African } \\ \text { American } \\ \text { Alone }\end{array} & \begin{array}{l}\text { American } \\ \text { Indian / } \\ \text { Alaska } \\ \text { Native Alone }\end{array} & \begin{array}{l}\text { Native } \\ \text { Hawaiian / } \\ \text { Other Pacific } \\ \text { Alone }\end{array} & \begin{array}{l}\text { Other } \\ \text { Islander Alone }\end{array} & \begin{array}{l}\text { Two } \\ \text { Race } \\ \text { Alone }\end{array} \\ \text { Police District } & \text { Total } \\ \text { More } \\ \text { Races }\end{array}\right]$

Source: U.S. Census Bureau, 2014 American Community Survey 5-Year Data, compiled by Baltimore Police Department, provided to PF team, June 28, 2018.

## 3 National Comparisons

### 3.1 Comparisons to 'national police service standards'

Many times, police agencies undertaking staffing studies look for a national standard regarding the number of police officers they should employ for patrol and other support functions within the department. Their request is usually similar to, 'how many officers should we have per capita or per square mile or for our crime rate.' Unfortunately, no such universal standard exists, and even if it did, this comparison could not sufficiently inform staffing decisions that address the nuances of each jurisdiction, community and police department. It simply would not provide an accurate or thorough approximation of the appropriate staffing to serve and

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protect a specific jurisdiction. This requires a comprehensive qualitative and quantitative analysis of current departmental staffing, workload data (including department mission and calls for service data), as well as input from stakeholders involved.

As an example, police departments across the nation are warned against using a standard national police response time as a baseline from which to compare performance in a specific department for a number of reasons. In addition to the discussion above about this being only a part of the total picture of police performance, things like size and terrain of geographic area, traffic patterns, population, force strength, and crime rates also have an effect on how long it takes for an officer to respond to a call for service. Therefore, response times across the nation vary broadly, making comparisons or using a national 'police response time standard' as a baseline relatively ineffective.

### 3.2 Comparisons to other cities

As part of the staffing study, the BPD Compliance Unit asked that a review of the organizational structure and staffing of several other 'comparable' departments be included. While the PF understands the desire to learn from other law enforcement agencies, we also want to warn against placing too much emphasis on such comparisons. As mentioned previously, while the basic functions of law enforcement agencies are similar across departments, each agency varies greatly in how they execute the work, interact with their communities, and address the nuances of their jurisdiction. In addition, it is important to note that data gathered for comparison can vary between police departments, and so an 'apples to apples' comparison is difficult. As an example, some police departments may have crime laboratory services within the department, which would likely increase the percentage of civilians working in the department but would not necessarily be explained in a comparison such as this one. For these reasons, the below information should be used as just one of the many pieces of information used when making staffing decisions.

Tables 7-9 present characteristics of Baltimore next to 'comparable' cities selected by PF and BPD staff. Cities and their police departments were selected for a combination of factors that made them comparable to the City of Baltimore and BPD including: comparable population size, demographic composition, violent crime and homicide rates, involvement in a consent decree, and their civilian compared to sworn staffing level.

Table 7 below shows city demographics for each of the selected cities to provide context for the comparisons.

Table 7: City Demographics Comparisons

|  | Baltimore city, MD | Denver city, CO | Oakland city, CA* | Seattle city, WA* | Memphis city, TN | Washington city, DC | Detroit city, MI | New <br> Orleans city, LA ${ }^{59 *}$ | Cleveland city, $\mathrm{OH}^{*}$ | Newark city, NJ* |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Population estimates (2016) ${ }^{60}$ | 614,664 | 704,621 | 425,195 | 724,745 | 652,717 | 681,170 | 672,795 | 391,495 | 385,809 | 281,764 |
| Population \% change (20102016) | -1.0\% | +17.5\% | +8.8\% | +19.1\% | +0.1\% | $+13.2 \%$ | -5.8\% | +13.9\% | -2.7\% | 1.7\% |
| Persons under 18 years (2010) | 21.5\% | 20.7\% | 20.4\% | 15.3\% | 26.0\% | 16.8\% | 26.7\% | 21.3\% | 24.6\% | 25.6\% |
| White alone (2010) ${ }^{61}$ | 29.6\% | 77.0\% | 38.2\% | 69.2\% | 29.4\% | $38.5 \%$ | 10.6\% | 33.0\% | 37.3\% | 26.3\% |
| Black or African American Alone (2010) | 63.7\% | 9.8\% | 24.7\% | 7.1\% | 63.3\% | 50.7\% | 82.7\% | 60.2\% | 53.3\% | 52.4\% |
| Median house-hold income (20122016) | \$44,262 | $\$ 56,258$ | \$57,778 | $\$ 74,458$ | $\$ 36,975$ | $\$ 72,935$ | \$26,249 | \$37,488 | \$26,583 | \$33,025 |
| Persons in poverty | 23.1\% | 16.4\% | 20.0\% | 13.0\% | 27.6\% | 18.6\% | 39.4\% | 26.2\% | 36.0\% | 29.1\% |
| Violent <br> Crime Rate per 100,000 people (2014) ${ }^{62}$ | 1,338.54 | $598.63$ | $1,685.39$ | $603.10$ | $1,740.51$ | $1,185.32$ | $1,988.63$ | $973.88$ | 1,334.35 | 1,077.71 |
| Homicide Rate per 100,000 people (2014) | 33.84 | 4.66 | 19.51 | 3.92 | 21.38 | 15.94 | 43.52 | 38.75 | 16.21 | 33.32 |

Table 8 provides an overview of staffing for comparison cities.

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Table 8: Police Department Staffing Comparisons

|  | Baltimore city, MD | Denver city, CO | Oakland city, CA* | Seattle city, WA* | Memphis city, TN | Washington city, DC | Detroit city, MI | New Orleans city, LA ${ }^{63 *}$ | Cleveland city, $\mathrm{OH}^{*}$ | Newark city, $\mathrm{NJ}^{*}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Actual <br> Department <br> Staffing <br> (2016) ${ }^{64}$ | 2,908 | 1,799 | 1,046 | 1,946 | 2,385 | 4,352 | 2,855 | 1,403 | 1,678 | 1,383 |
| Sworn | 2,512 | 1,483 | 750 | 1,384 | 1,978 | 3,753 | 2,350 | 1,171 | 1,444 | 1,113 |
| Sworn as a percentage of total actual department staffing | 86.4\% | 82.2\% | 71.7\% | 71.1\% | 82.9\% | 86.2\% | 82.3\% | 83.5\% | 86.1\% | 80.5\% |
| Civilian ${ }^{65}$ | 396 |  |  | 562 |  | 599 | 505 | 232 | 234 | 270 |
| Civilian as a percentage of total actual department staffing | 13.6\% | 17.6\% | 28.3\% | 28.9\% | 17.1\% | 13.8\% | 17.7\% | 16.5\% | 13.9\% | 19.5\% |
| Training | 71 |  |  |  |  |  |  | $27^{66}$ | $21^{67}$ | $13^{68}$ |
| Office of Professional Standards | $52^{69}$ |  |  |  |  |  |  | $40^{70}$ | $8^{71}$ | $21^{72}$ |

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| Annual 911 Calls for Service (Received calls unless otherwise noted) | $\begin{aligned} & \text { 1,102,121 } \\ & \text { (July } \\ & \text { 2016-June } \\ & \text { 2017) } \end{aligned}$ |  | $\begin{aligned} & 558,948 \\ & (2016)^{73} \end{aligned}$ | $\begin{aligned} & 866,331 \\ & (2015)^{74} \end{aligned}$ | $\begin{aligned} & 1,500,600 \\ & (2016)^{75} \end{aligned}$ | $652,122$ <br> (dispatched 2016) ${ }^{76}$ | ```223,351 (dis- patch- ed 2015 partial) 77``` | $\begin{aligned} & 320,339 \\ & (2012)^{78} \end{aligned}$ | $\begin{aligned} & 327,656 \\ & (2015)^{79} \end{aligned}$ | 520,000 <br> (dispatch -ed general estimate . Unified City Communications Division receives 960,000 per year. $)^{80}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Calls for Service Call Priority | Priority 1 = high priority (emergency type), Priority 2 = medium priority (disturbance type), Priority 3 = low priority (property type), Priority 4 = non-emergency | Priority <br> 0 <br> through <br> $2=$ <br> immi- <br> nent <br> threat <br> to life, <br> Priority <br> 3 and 4 <br> = public <br> quality <br> of life <br> issue, <br> Priority <br> 5 and 6 <br> = <br> property |  |  |  | Priority I = imminent threat, Priority II = immediate response, Priority III = routine request | Priority 1 = <br> highest priority like active robberies or shootings | Code <br> Two = <br> imme- <br> diate <br> response <br> required, <br> Code <br> One = <br> non- <br> emer- <br> gency, <br> Code <br> Zero = <br> other |  |  |

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Table 9 shows comparison organizational structures and an overview of span of control. Generally, police organizations rely on a hierarchical structure to operate. Organizational

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dimensions within the structure impact implementation of community policing philosophies within a department and should be carefully considered while making organizational decisions such as staffing requirements and particularly during reform efforts. Hierarchical organizations vary from other types of organizations in their task specialization, formalization, span of control, centralization versus decentralization, complexity, and the allocation of personnel in line vs. staff positions. These dimensions frame the way in which the organization operates. ${ }^{91}$

Organizational structures typically associated with community policing include the following characteristics:

- Decentralization - authority and responsibility delegated more widely so that commanders, supervisors, and officers can act more independently and be more responsive.
- Flattening - the number of layers of hierarchy in the police organization reduced in order to improve communications and reduce waste, rigidity and bureaucracy.
- De-specialization - the number of specialized units and personnel reduced, with more resources devoted to the direct delivery of police services and community-oriented policing to the general public.
- Teams - efficiency and effectiveness improved by asking employees to work together as teams to perform work, solve problems or look for ways of improving quality.
- Civilianization - positions currently held by sworn personnel reclassified or redesigned for non-sworn personnel, allowing both cost savings and better utilization of sworn personnel. ${ }^{92}$

BPD should determine whether the current structure allows for the level of task specialization, formalization, span of control, centralization versus decentralization, complexity, and sworn vs. civilian staff allocation best support BPD's mission and goals. Applying these characteristics to the BPD organization, there are currently at least 5 levels of structure between the BPD chief executive (commissioner) and police officers assigned to sector patrol, more than any of the comparison cities. BPD should consider flattening their structure as a way to improve communication. The department should also ensure that supervisor to officer ratios in the districts remain approximately six or eight to one (6-8:1) even when the number of police officers assigned to sector patrol increases to budgeted levels.

Table 9: Police Department Organizational Structure and Span of Control Comparison ${ }^{93}$

|  | Baltimore <br> city, MD | Denver <br> city, CO | Oakland <br> city, CA* | Seattle <br> city, <br> WA $^{*}$ | Memphis <br> city, TN | Washington <br> city, DC | Detroit <br> city, MI | New <br> Orleans | Cleveland <br> city, OH* | Newark <br> city, NJ* $^{*}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

[^19]|  |  |  |  |  |  |  |  | city, LA ${ }^{94 *}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Agency Head | Police Commissio ner | Chief of Police | Chief of Police | Chief of Police | Director of Police Services | Chief of Police | Chief of Police | Superint endent of Police | Chief of Police and DC Executive Officer ${ }^{95}$ | Chief of <br> Police <br> (who <br> reports <br> to Public <br> Safety <br> Director) <br> 96 |
| Number of Direct Reports to Agency Head | 7 | 4 | 5 | 4 |  |  | 5 |  |  | 7 |
| Number of <br> Bureaus/Div <br> isions <br> Reporting <br> Directly to <br> Agency <br> Head | 2 | 4 | 2 | 2 | 3 | 8 | 3 | 5 | 3 | 2 |
| Number of Offices Reporting Directly to Agency Head | 5 | $0$ | $3$ | 2 |  | $0$ | 2 | 2 | 4 | 5 |
| Organizational Level of the Patrol District | 5 | 3 | 4 | 4 | 4 | 3 | 4 | 3 | 4 | 3 |

The City of Denver has a population of 704,621 in its 155 square miles, making it slightly larger than Baltimore's population of 614,664 over 92.28 square miles. Approximately 1,799 employees serve the Denver Police Department, comprised of 1,483 sworn and 316 civilian members, ${ }^{97}$ compared to BPD's 2,908 employees comprised of 2,512 sworn and 396 civilian members.

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The Denver Police Department is led by a chief of police. Deputy chiefs oversee the Operations Bureau, which includes the patrol districts, Major Crimes Division, Investigative Support Division, Special Operations Division, and Forensics and Evidence Division, and Administration Bureau, which includes the Internal Affairs Division, Airport Police Division, Administrative Management Division, Operations Support Division, Training Division, and Crisis Services Division among other sections. Denver is organized into six patrol districts compared to Baltimore's nine. The Chief also directly oversees the Conduct Review Division and Chief of Staff/Community Relations Division. ${ }^{98}$

### 3.2.2 Oakland, California*

The City of Oakland has a population of 425,195 people, smaller than Baltimore's population of approximately 614,664. About 750 employees of Oakland Police Department's total 1,046 are sworn members, making it approximately 71.7 percent sworn and 28.3 percent civilian compared to BPD's 86.4 percent sworn and 13.6 percent civilian. ${ }^{99}$ In 2016, Oakland received 558,948 calls for service, 254,017 of which were dispatched. ${ }^{100}$ Covering over 77 square miles, Oakland Police Department is divided into two Bureaus of Field Operations and five patrol areas compared to BPD's 92.28 square miles and nine patrol districts. ${ }^{101}$

The Oakland Police Department is led by a chief of police with an assistant chief of police who oversee the Bureau of Field Operations 1, Bureau of Field Operations 2, Bureau of Investigations, Bureau of Services, Training Division, and Ceasefire. The chief also directly oversees the Internal Affairs Division, Office of Inspector General, Chief of Staff, and Intelligence Unit. ${ }^{102}$

### 3.2.3 Seattle, Washington

The City of Seattle spans 83.78 square miles and is served by the Seattle Police Department with 1,946 employees, including 1,384 sworn members, making it approximately 71.1 percent sworn and 28.9 percent civilian, compared to BPD's 2,512 sworn members, which make BPD 86.4 percent sworn and 13.6 percent civilian. ${ }^{103}$ Seattle has a population of about 724,745 , which is slightly higher than Baltimore's population of 614,664. Seattle's 911 center handled

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866,331 calls in 2015. ${ }^{104}$ In January 2018, a U.S. District Judge found the Seattle Police Department in "full and effective compliance" with court-ordered reforms, a little over five years after entering into a consent decree with DOJ, and enabling the department to begin Phase II, a two-year review period. ${ }^{105}$

A chief of police leads the Seattle Police Department. The chief directly oversees the senior police counsel, chief strategic advisor, deputy chief of operations, and chief operating officer. The deputy chief of operations oversees the Patrol Operations Bureau, Criminal Investigations Bureau, and Special Operations Bureau, as well as Community Outreach. The chief operating officer oversees the Compliance/Professional Standards Bureau, Human Resources, Chief Financial Officer, Information Technology, 911 Communications, and Public Affairs. ${ }^{106}$

### 3.2.4 Memphis, Tennessee

Approximately 1,978 sworn officers and 407 civilian employees (a total of 2,385 employees) with the Memphis Police Department serve the city of about 656,434 people. ${ }^{107}$ Comparatively, BPD has approximately 2,908 employees with 2,512 of those as sworn members. The City of Memphis spans 324 square miles, with two districts made up of nine police precincts, compared to the City of Baltimore's 92.28 square miles covered by nine police districts. In 2016, the department handled a total of 977,954 calls for service, out of 1,500,600 emergency and non-emergency calls received, slightly lower than the 1,014,974 calls handled in 2015, and higher than the 903,112 calls handled in $2014 .{ }^{108}$ BPD similarly receives approximately $1,102,121$ calls for service annually. The Memphis Police FY2016 actual budget was $\$ 5,162,192$ for capital improvements, $\$ 217,491,121$ for personnel services, and $\$ 22,930,827$ for materials/supplies. ${ }^{109}$

The Memphis Police Department is led by a director of police services. Under the director, a deputy director oversees the deputy chief of uniform patrol for District I, deputy chief of uniform patrol for District II, deputy chief of investigative services, and deputy chief of special operations. The deputy chief of administrative services and deputy chief of police information

[^22]technology, along with some other units like Inspectional Services including Internal Affairs, report directly to the director. ${ }^{110}$

### 3.2.5 Washington, DC

Washington, DC has a population of more than 681,170 , served by the Metropolitan Police Department with approximately 3,753 sworn officers and 599 civilians for a total of 4,352 employees (compared to BPD's 2,908 employees). ${ }^{111}$ More than 3,000 are officers and detectives. The District's population grew by more than 13 percent between 2009 and 2016 while violent crime decreased by 21 percent. The department handled 652,122 calls for service in 2016, an increase from 629,526 in 2015 and 593,754 in $2014 .{ }^{112}$ This is generally lower than BPD's 1,102,121 calls for service from July 2016-June 2017. Generally, for the Metropolitan Police Department, Priority I calls involve an imminent threat to someone's safety or significant property damage, Priority II calls require immediate response but do not involve an imminent threat, and Priority III calls involve routine requests for police services that do not involve an imminent threat (compared to BPD's predominant use of four different priority types). ${ }^{113}$ The District is 68.34 square miles and is divided into seven districts compared to Baltimore's 92.28 square miles divided into nine police districts. The department's FY2016 total gross expenditures totaled $\$ 543,434,479.31$. Of this, the department spent $\$ 459,824,918.59$ on total personnel services, which included $\$ 34,845,428.32$ on overtime, and $\$ 83,609,560.72$ on nonpersonnel services including supplies, fixed costs, contracts, subsidies and transfers, and equipment. ${ }^{114}$

The Metropolitan Police Department's chief of police oversees seven major bureaus: Patrol Services North, Patrol Services South, Homeland Security Bureau, Corporate Support Bureau, Professional Development Bureau, Investigative Services Bureau, and Internal Affairs Bureau. The chief also has a chief operating officer who oversees the Office of Communications, Strategic Change Division, Executive Protection Unit, Office of the Chief Information Officer, and Office of Risk Management, among other offices. ${ }^{115}$

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### 3.2.6 Detroit, Michigan

The City of Detroit encompasses 142.9 square miles, greater than Baltimore's 92.28 square miles, and has a population of approximately 669,673 , slightly higher than Baltimore's population of approximately 614,664. 2,350 sworn officers and 505 civilian employees, a total of 2,855 employees, serve with the Detroit Police Department (compared to BPD's 2,512 sworn and 396 civilians for a total of 2,908 employees). ${ }^{116}$ In 2015, DPD addressed 223,351 calls for service from January 1 through November 2, including 62,122 calls that they label Priority 1, which indicates the highest priority like active robberies or shootings. In comparison, BPD received 50,155 calls from July 2016-June 2017 that they labeled high priority emergency-type calls. For these Priority 1 calls, DPD reports an average total response time of 14.47 minutes (including averages of 4.95 minutes in the queue and 9.52 minutes in travel time). ${ }^{117}$ City of Detroit actual expenditures on police in FY2017 were $\$ 270,939,087 .{ }^{118}$

DPD is led by a chief of police. Assistant chiefs oversee Enforcement Operations, the Office of the Chief, and Administrative Operations. Enforcement Operations includes DPD's 12 patrol districts, the Metro Division, Criminal Intelligence, Cease Fire, and the Detective Bureau. The Office of the Chief includes Media Relations, Labor Relations, Professional Standards, Human Resources, and Budget Operations. Administrative Operations includes Resource Management, Communications Bureau, Technology Services Bureau, and Support Services. ${ }^{119}$

### 3.2.7 New Orleans, Louisiana

The City of New Orleans, Louisiana, has a population of 398,208, lower than Baltimore's 614,664 . New Orleans spans approximately 350 square miles, half of which is water. The New Orleans Police Department has 1,403 employees, including 1,171 sworn officers and 232 civilian employees. ${ }^{120}$ (BPD has 2,908 employees, including 2,512 sworn and 396 civilian). In 2013, the City of New Orleans, the New Orleans Police Department, and DOJ entered into a consent decree. In 2014, the City's Office of Inspector General concluded a final report on New Orleans Police Department Staffing and Deployment report, which found that in 2012, NOPD received 6,139 Code Zero calls, 134,430 Code One (non-emergency) calls, and 123,655 Code Two (immediate response required) calls, not including other calls that led NOPD's citizen generated

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calls for service to equal $320,339 .{ }^{121}$ Comparatively, BPD received 50,155 calls that they labeled high priority emergency-type calls. Since the report's recommendations, NOPD has increased the number of officers available for patrol such as by reassigning officers, civilianizing roles, and staggering shift times. ${ }^{122}$

The department is led by the superintendent of police. The superintendent oversees five bureaus, each of which is led by a deputy superintendent: Field Operations Bureau, Investigations and Support Bureau, Public Integrity Bureau, Management Services Bureau, and Compliance Bureau. In addition, the superintendent directly oversees the News Media Relations/Public Affairs Office as well as the Administrative Office/General Operations, which includes Inter-Bureau Coordination and the Crime Prevention Section. ${ }^{123}$

### 3.2.8 Cleveland, Ohio*

The City of Cleveland is 82.39 square miles and has a population of 386,227 , lower than Baltimore's 614,664 . Approximately 1,444 sworn officers and 234 civilian employees, a total of 1,678 employees, serve in the Cleveland Division of Police (compared to BPD's 2,512 sworn and 396 civilian for a total of 2,908 employees). ${ }^{124}$ Following a 2014 DOJ investigation, the City of Cleveland and DOJ entered into a consent decree, which will require a comprehensive staffing study. ${ }^{125}$ In 2016, Cleveland dispatched 266,407 calls for service, including both 911 and nonemergency calls. ${ }^{126}$ The Cleveland Police receives about 327,656 911 calls per year and investigated 66,895 cases in 2015 . ${ }^{127}$ The 2016 police department was $\$ 190,636,623$, a six percent increase over the previous year, but Cleveland also hosted the Republican National Convention in the same year. This police budget comprised $\$ 128,319,105$ in salaries and wages, $\$ 52,417,897$ in benefits, $\$ 5,500$ for other training and professional dues, $\$ 2,016,865$ for utilities, $\$ 618,180$ in contractual services, $\$ 481,500$ for materials and other supplies, $\$ 539,000$

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in maintenance, $\$ 260,000$ in claims, refunds, and maintenance, and $\$ 5,978,578$ in interdepartmental service charges. ${ }^{128}$

Led by a chief of police, the Division of Police is organized into Administrative Operations, Field Operations, and Homeland Special Operations. ${ }^{129}$ The City is organized into five police districts, compared to BPD's nine districts.

### 3.2.9 Newark, New Jersey*

With approximately 1,383 employees, comprised of 1,113 sworn officers and 270 civilian employees (compared to BPD's 2,908 employees made up of 2,512 sworn and 396 civilian), the Newark Police Division serves the City of Newark, New Jersey. ${ }^{130}$ Smaller in geographic size and population than Baltimore, Newark encompasses 25.98 square miles and has a population of 281,450. In 2016, the City of Newark and DOJ entered into a consent decree focused on internal affairs; stops, searches, and arrests; community engagement and civilian oversight; use of force; data systems improvements; bias free policing; and in-car and body-worn cameras. ${ }^{131}$ The City's Communications Division handles approximately 960,000 emergency and nonemergency calls per year, including more than 52,000 calls for service responded to by the Police Division yearly (compared to BPD's 1,102,121 calls for service received from July 2016June 2017). ${ }^{132}$

The Newark Police Department has a public safety director who directly oversees the chief of staff, which includes the Training Division; a special assistant who oversees the Public Information, Candidate Investigations, and Community Affairs Units; a special assistant who oversees the Finance and Grants Section; the Consent Decree and Planning Division; Human Resources Division; and chief of police. The chief of police oversees the Operations Bureau, which includes Newark's five precincts and the Special Operations, Special Victims, General Crimes, Major Crimes, and Special Enforcement Divisions; and the Support Services Bureau, which includes Communications, Municipal Arrest Processing, Municipal Holding, and Property and Evidence. The chief of police also oversees the Office of Professional Standards, Command Operations Center, Comstat/UCR Unit, Alcohol Beverage Control, and Executive Production Unit. ${ }^{133}$

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## 4 Patrol Analyses of Baltimore Police Services

While the BPD total budgeted staffing for 2017 was 3,354 total personnel ( 2,846 sworn and 508 civilian), its funded staffing was 3,128 ( 2,621 sworn and 507 civilian), and its actual staffing (filled positions) was 2,956 ( 2,526 sworn and 430 civilian) with Department-wide vacancies ${ }^{134}$ of 172 ( 3.0 percent sworn and 2.5 percent civilian out of total funded). Sworn funded staffing in 2017 was 2,621 with 2,117 assigned to patrol. Not all of these sworn personnel are assigned to street patrol functions.

In July 2018, under Commissioner Tuggle, BPD assigned 115 additional officers to sector patrol, placed in districts to serve in patrol functions. ${ }^{135}$ Twenty-one of these officers were pulled from district burglary units, which was dissolved in the process, while the remainder were serving as foot patrols in specially-assigned areas in the city. ${ }^{136}$

This chapter will provide methodology and justification used for developing recommended sector patrol staffing levels.

### 4.1 Methodology \& Data

The International City/County Management Association Center for Public Safety Management (ICMA/CPSM) in their report titled, "An analysis of police department staffing: How many officers do you need?" ${ }^{137}$ identifies five common methods for determining staffing models: crime trends, per-capita, minimum staffing, budgeted positions, and workload analysis. The report identifies the workload analysis model as the superior methodology for identifying police department staffing needs based on its reliance on actual levels of demand for police services and attempts to match the demand with the supply of services. As is the case with any staffing model, shortcomings exist. The level of demand in the workload analysis model relies on calls for service data retrieved from the dispatch system and without adjustment does not take into consideration community expectations and operational demands facing the department. Those perspectives, however, should be sought and taken in to consideration along with the workload analysis. Although somewhat complex, the workload demand model is considered to be the most accurate and reliable predictor of police staffing levels. ${ }^{138}$ The PF team used this workload

[^27]analysis methodology to determine the number of police officers assigned to sector patrol needed in each BPD district to handle their workload.

Following the workload analysis model, a comprehensive analysis of patrol is designed to determine the number of officers required to handle calls for service in a city and allows for adequate unallocated time for self-initiated activity (including community engagement and other leadership-defined priorities). The analysis should account for all variables including but not limited to response time, time on scene, and report writing time, for all police officers assigned to the call.

The first step of the analysis used calls for service (CFS) records pulled from the BPD computer aided dispatch (CAD) system for the period July 1, 2016 - June 30, 2017. ${ }^{139}$ Using this data, the following section provides an overview of BPD's 911 CFS call priority and response time. After organizing and cleaning the data, PF team members generated citywide calls for service counts by priority type and average response time for each priority type.

Team members then converted and separated the CAD CFS data by each of the nine patrol districts. The PF team used this data to conduct preliminary analyses of each district for 911 CFS and self-initiated types of police officer activity. The PF team generated the average number of CFS for each district and identified the most frequent types of dispatched CFS as well as the most frequent types of self-initiated activities recorded in CAD. The PF team also calculated the average amount of police officer time spent answering CFS, self-initiated activities, and details. Based on these calculations, the PF team calculated the average total amount of time consumed for each district. These were compared to staffing weekly hours derived from February 3-20, 2018 shift strength reports to provide district-level summaries of current demand for police officer time.

Finally, the team requested payroll data from January 1, 2017 through December 31, 2017 with leave codes. The payroll data was used to calculate vacation, holidays, sick leave, training time and other leave or activity time that takes officers out of the patrol function. These provided the amount of focused patrol time officers are available to actually 'work the street.' The PF team also requested lists of officers assigned to each district in January and December of 2017 to generate lists of officers who worked in the district for the full year.

After extensive cleaning and organizing, the data provided the average amount of time over the course of a year that officers are available for patrol functions. Considering BPD's existing average CFS and self-initiated workloads, the PF team calculated the number of officers needed for each district to handle CFS and self-initiated activities for 60 percent of time focused on responding to CFS and 40 percent of time for priorities directed by the agency, specifically community engagement, problem solving, and other self-initiated activities. This analysis

[^28](outlined in Table 14 below) provides the results of the workload analysis with recommended number of police officers assigned to sector patrol necessary to serve the city of Baltimore.

### 4.1.1 Data and Analysis Limitations

The data analyses conducted are based on the accuracy of the data used. A reliable analysis thus depends on extensive, consistent, and accurate data such that workload can be measured in the total time required to handle a particular call type. As the BPD Technology Resource Study (submitted to the Court in June 2018) notes in more detail, data entries may not always be entered into systems properly, policy and protocol may not be followed, and a reliance on multiple different systems may encourage discrepancies. As an example, the PF data analyst found that in many instances the data field for officers' arrival time on scene was left blank. This means that either the officer did not call in his arrival on-scene to communications, or it was not entered into CAD by dispatch personnel. Either way, this absence of data could artificially inflate response times for calls for service. For this reason, those CFS without arrival times listed were removed from our data set. A number of other limitations are noted in each of the following sections.

Although imprecise due to data limitations, the PF team believes that this analysis is an accurate analysis and estimation of required patrol staffing requirements. This analysis can provide BPD with a solid foundation on which to build a staffing plan that will set BPD up for successful policing in Baltimore.

### 4.2 Response Times as Part of a Broader Measure of Police Performance

To the community, the time it takes a police officer to respond to a call for service (CFS) is extremely important. The public wants to know that an officer will show up in a timely manner to solve a problem and keep them safe. Hôwever, this measure is only a piece of a larger analysis of the quality of police service. Research in this area has shown that, "Shortening police response may have little effect on the chances of a burglar or robber being caught." ${ }^{140}$ While response time is important, it needs to be considered as part of a comprehensive strategy that focuses on improving community trust as well as addressing crime, the perception of crime and safety, and the commitment to community policing and engagement.

The response times analysis conducted here should be used to inform the patrol staffing plan. If current response times are to be improved, for example, BPD should take this into consideration while determining patrol allocation and deployment across the city.

### 4.2.1 Call Priority

[^29]Police response to community calls for service are typically triaged based on the danger that exists at the time of the call and the severity of the crime. For example, a shooting in progress would be a higher priority than a burglary where the suspect has left the premises.

The BPD, like most police departments, uses a coding system to establish call priority. Calls are prioritized as follows:

- Priority 1: High priority emergency-type calls and those involving serious crimes such as shootings, aggravated assaults, or robbery
- Priority 2: Medium priority, disturbance-type calls -such as neighbor/family disputes, missing persons, suspicious person, or drug activity-in the neighborhood
- Priority 3: Low priority property-type crimes, such as destruction of property, larceny, or auto theft.
- Priority 4: Non-emergency calls in which no urgency exists, but police response is requested.
- Other Priority: A very small percentage of calls are labeled another priority type like priority 5, "out of service," or priority E, "emergency."

The percentage of calls for each priority type are illustrated in Figure 6 below. The greatest volume of calls exists within Priority 2. When combined, priorities 2 and 3 account for 78.7 percent of all dispatched call activity in Baltimore. Table 31 in Appendix 13.7.1 displays a review of the data by district, which shows very similar call priority ratios.

Figure 6: Citywide 911 Calls for Service by Priority

## 911 Calls for Service by Priority



- Priority 1 - Priority $2 ■$ Priority $3 ■$ Priority $4 \square$ Other Priority

Note: This figure does not include records that either had a blank district field or some designation other than one of the districts.

Source: BPD Computer Aided Dispatch data, July 1, 2016 - June 30, 2017.

A review of the average response times for each of the four priorities is illustrated in Figure 7 below. Response time for this table was calculated from the time a call is received at the Baltimore Police Dispatch Center to the time the first officer arrived at the scene. The average response times range from a low of 15.9 minutes for a Priority 1 call to 37.3 minutes for Priority 4 call.

When the range is examined at the district level, the Western District has the fastest response time in all four priorities followed by the Eastern District. The slowest response time in all four priorities is Southwestern District. By comparison the response time for Priority 1 calls in the Western District is over 5 minutes faster than Southwestern District, Western's response to Priority 2 calls is over 10 minutes faster, the district's response to Priority 3 calls is nearly 16 minutes faster, and for Priority 4, Western is 13.3 minutes faster than Southwestern. It is important to note, however, that each district has unique call volumes, geographic sizes, logistics, administrative and staffing considerations.

The district to district comparison, therefore, provides little in the way of valuable insight into staffing. However, BPD would gain valuable information by investigating these variations and using the conclusions to inform patrol staffing and deployment in the districts to create efficiencies in response to calls for service.

Figure 7: Citywide Average Response Time

Citywide Calls for Service Response Time Average Minutes


Note: Figure uses data that includes only one record per call. Back-up units are not included. Only those calls with arrival times are in this data.
Source: BPD Computer Aided Dispatch data, July 1, 2016 - June 30, 2017.

### 4.3 BPD Patrol Workload Analysis (2016-2017)

Like in most American law enforcement agencies, BPD police officers assigned to sector patrol spend their time responding to calls for service from the public, engaging in field-initiated activity, and performing a variety of administrative tasks. The public asks for police service by calling the police dispatch center-either through 911 or on a non-emergency line. They may also hail an officer in the field or come to a police facility seeking help. Police officers responding to a call from the public may handle the incident in several different ways. They may handle it informally, simply solving the problem at hand, directing individuals to other resources, or a myriad of other ways. They may write a report if a crime has been committed or the situation warrants documenting the incident. If circumstances justify it, they may issue a citation or make an arrest. Time spent on calls for service may also include the time it takes an officer to write a report.

Other police officer activity occurs when officers personally observe some activity worthy of further police attention (usually referred to as "on-view" or "self-initiated"). Police officers initiate an action because they see suspicious behavior, observe a traffic violation, are conducting a follow-up investigation to gather more information on a previous case, are positively engaging with the community, or are looking for suspects with outstanding warrants. Such activities are products of an officer's discretion. The officer decides when and where to begin these encounters. The frequency of self-initiated activities performed by an officer is dependent, to some extent, on how busy the officer is with calls for service, an officer's initiative, and the behavior of those he/she encounters.

### 4.3.1 Workload Analysis Background

The PF requested a year of CAD data (July 1, 2016 - June 30, 2017), to assess patrol workload in Baltimore. Because this analysis of patrol workload is based on how police officers use the time that they are allocated during a shift, the data furnished by the BPD included the activity of each in-service officer in each of the nine districts during each shift on each call or self-initiated activity. The resulting database includes 1,198,909 records of individual 911 calls for service and self-initiated activity.

The data illustrated in Table 10 below represents the numbers of calls broken down by calls for service (CFS) and self-initiated (SI). Citywide, the database documented 1,102,121 calls for service, which includes 911 /no voice calls, and documented 96,788 instances categorized by BPD as self-initiated activity.

It is worthy to note that community-initiated calls for service are documented in the dispatch system when the call is received. This means that BPD's CAD should document all 911 calls received. Therefore, the workload generated is fairly reliable. Capturing self-initiated activity is less reliable because it requires an officer to notify dispatch of the activity. Many variables may
influence an officer's decision to place themselves on a self-initiated activity including Department Policy, volume of radio traffic, shift norms, and intuition.

Table 10: Breakdown of Calls for Service and Self-Initiated Activity by Baltimore City Police Officers

| District | Total | Calls for Service <br> (CFS) | Self-Initiated <br> (SI) | Percent CFS |
| :--- | :--- | :--- | :--- | :--- |
| 1 - Central | 135,038 | 123,061 | 11,977 | $91 \%$ |
| 2 - Southeastern | 129,096 | 119,090 | 10,006 | $92 \%$ |
| 3 - Eastern | 123,895 | 109,461 | 14,434 | $88 \%$ |
| 4 - Northeastern | 177,018 | 164,940 | 12,078 | $93 \%$ |
| 5 - Northern | 132,765 | 124,340 | 8,425 | $94 \%$ |
| 6 - Northwestern | 122,576 | 114,996 | 7,580 | $94 \%$ |
| 7 - Western | 115,852 | 104,634 | 11,218 | $90 \%$ |
| 8 - Southwestern | 125,546 | 116,160 | 9,386 | $93 \%$ |
| 9 - Southern | 134,230 | 123,704 | 10,526 | $92 \%$ |
| Other/Not Assigned* | 2,893 | 1,735 | 1,158 | $60 \%$ |
| Citywide | $1,198,909$ | $1,102,121$ | 96,788 | $92 \%$ |

*Note: These records either had a blank field or some designation other than one of the districts. This table includes records with no arrival or cleared time. Calls with no cleared times are dropped for the workload analysis. Source: BPD Computer Aided Dispatch Calls for Service data, July 1, 2016 - June 30, 2017.

The Northeastern District had the highest volume of total call and self-initiated officer activity $(177,018)$ while the Western District had the lowest $(115,852)$.

Most BPD districts recorded less than 10 percent of their activity as self-initiated. ${ }^{141}$ The reported amount of self-initiated activity is a product of officer initiative and available time. PF researchers find that this varies widely from agency to agency. In some agencies, 40 percent of activity may be self-initiated activity. ${ }^{142}$ In other agencies with heavy calls-for-service workload, self-initiated time may be less than 15 percent of the total workload. ${ }^{143}$

The next table shows the most frequent types of calls for service in Baltimore for the year long period.

[^30]Table 11: BPD Most Frequent Dispatched Call Types Recorded in CAD

| Dispatched Call Type | Number | Priority |
| :--- | :--- | :--- |
| $89-911 /$ NO VOICE CALL | 136,004 | 2 |
| 55 - DISORDERLY PERSON | 128,608 | 2 |
| $4 E-$ COMMON ASSAULT | 93,183 | 2 |
| 79 - OTHER | 88,399 | 3 |
| 870 - NARCOTICS - OUTSIDE | 50,913 | 2 |
| 65 - SILENT ALARM | 46,448 | 1 |
| 5 - BURGLARY | 45,627 | 2 |
| 30 - ACCIDENT-AUTO | 41,997 | 3 |
| 49 - FAMILY DISTURBANCE | 41,031 | 2 |
| 54 - ARMED PERSON | 27,975 | 1 |
| 6 - LARCENY- OTHER | 27,727 | 3 |
| 57 - SUSPICIOUS PERSON | 22,365 | 2 |
| 99 - ACCIDENT-HIT \& RUN | 19,950 | 3 |
| 75 - DESTRUCT. OF PROPERTY | 19,248 | 3 |
| $4 D ~-~ A G G ~ A S S A U L T ~-~ H A N D S ~$ | 18,212 | 1 |
| $6 D ~-~ L A R C E N Y-~ F R O M ~ A U T O ~$ | 15,243 | 3 |
| $7 C ~-~ S T O L E N ~ V E H . / O T H E R ~$ | 14,351 | 3 |
| 31 - ACCIDENT-PERSON INJ. | 14,263 | 1 |
| 83 - DISCHARGING FIREARM | 12,584 | 1 |
| 85 - BEHAVIORAL CRISIS | 12,031 | 2 |

Note: Dispatched calls used for this analysis includes all sector patrol and backups. It includes cancelled calls, as such calls still take up officer time. Source: BPD Computer Aided Dispatch data, July 1, 2016 - June 30, 2017.

The single most frequent call type is "911/ No Voice" call, which are given a Priority 2, and account for 12.3 percent of total calls for service. This call type represents 911 hang-ups, duplicate calls, or calls where the call-taker is not able to get information from the caller. Police officers initially respond to all 911 calls, even if they are hang-up calls. The response may be cancelled if it is discovered to be an accidental 911 activation, a duplicate call or some other indication that there is no need for a police response. However, a 911 hang-up may be a legitimate request for police help that was interrupted by a crime in progress or a caller not being able to talk to the call-taker. Therefore, almost all 911 calls are initially dispatched while communications personnel try to verify whether a police response should continue or whether it can be cancelled.

The next two frequent call types-"Disorderly Person" and "Common Assault"—represent incidents of interpersonal conflict.

There were approximately 600 call type codes in the BPD CAD database provided to the PF Team. This is a large number of type codes. Consequently, the high number of calls in the "Other" category (8 percent) is a concern. 'Other' type calls are ones that officers are dispatched to with little information about their nature. These calls are coded this way because the 911 caller was unable or unwilling to provide further information. ${ }^{144}$ It would seem that more of these calls should be able to be labeled with one of the substantive call type codes.

The next table provides information on about the most frequent self-initiated activities recorded by BPD. Tables with the most frequent types of activities labeled self-initiated for each patrol district are displayed in Appendix 13.6.

Table 12: BPD Most Frequent Self-Initiated Activities Recorded in CAD


Source: BPD Computer Aided Dispatch data, July 1, 2016 - June 30, 2017.
Data assigned "Detail" $(28,225)$ type is the most frequent and accounts for 29 percent of all self-initiated activity. BPD "Detail" activity accounts for police officers pulled from call response status to perform a special task such as providing security for special events, engaging in a

[^31]specific anti-crime activity or another assignment other than call for service response such as hospital details, assignment to another district to guard mobile command post, etc.

The "FI Code" is used when officers conduct field interviews.

### 4.3.2 Workload Analysis by District

The PF team analyzed the average amount of time officers in each of the nine districts spent on calls for service, self-initiated activity, and details from the dispatch data supplied by the department. Available police officer time was established from the shift strength reports furnished by the BPD. ${ }^{145}$

Baltimore police officers assigned to sector patrol work a schedule dictated by the collective bargaining agreement. ${ }^{146}$ They work four days of ten hours shifts, followed by three days off. Officers' shifts begin at the top of the hour and they attend roll call during the first 30 minutes of the shift. Of note is that officers are required to stay 36 minutes past the end time of their shift before they are paid overtime. This is in accordance with the bargaining agreement, so they may actually work 10.6 hours per shift. The shifts are as follows:

Shift A 2200-0800
Shift B 0700-1700
Shift C 1600-0200 (Sunday - Thursday); 1700-0300 (Friday - Saturday)

An analysis of the workload compared against the current staffing model and practices revealed that in an average across the nine districts, BPD police officers assigned to sector patrol spend 55.6 percent of their shift handling calls for service, 7.2 percent conducting self-initiated activity, and 2.9 percent of their time on a detail that may or may not be patrol related. This leaves 34.3 percent of their time for administrative functions and community engagement opportunities. It is important to note that the averages in Table 13 are average estimates based on a snapshot of time; available time for self-initiated activities and community oriented policing activities fluctuate significantly over the course of a shift, therefore averages do not necessarily accurately capture the amount of time spent.

Appendix 13.6 provides a more detailed view of the average amount of officer time consumed by calls for service for each district by hour and day of the week.
Table 13: Summary of BPD District Staffing Analysis

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| District | Staff <br> Hours per <br> Week ${ }^{147}$ | CFS <br> Hours <br> Per <br> Week ${ }^{148}$ | Average CFS <br> Percentage <br> Time <br> Consumed ${ }^{149}$ | SI Hours per Week ${ }^{150}$ | Average SI <br> Percentage <br> Time <br> Consumed ${ }^{151}$ | Detail <br> Hours per <br> Week ${ }^{152}$ | Average <br> Detail <br> Percentage <br> Time <br> Consumed ${ }^{153}$ | Average <br> Total <br> Percentage <br> Time <br> Consumed ${ }^{154}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Central | 2,398 | 1,155.6 | 52.6\% | 182.7 | 8.3\% | 98.8 | 4.1\% | 64.9\% |
| Southeastern | 2,979 | 1,596.9 | 57.8\% | 191.5 | 6.8\% | 63.3 | 2.1\% | 66.7\% |
| Eastern | 2,787 | 1,280.2 | 50.0\% | 266.9 | 10.2\% | 100.9 | 3.6\% | 63.6\% |
| Northeastern | 3,693 | 2,063.9 | 60.1\% | 241.4 | 6.9\% | 92.6 | 2.5\% | 69.5\% |
| Northern | 2,771 | 1,572.1 | 61.9\% | 133.3 | 5.2\% | 59.7 | 2.2\% | 69.3\% |
| Northwestern | 2,641 | 1,433.6 | 58.7\% | 148.3 | 5.9\% | 59.4 | 2.2\% | 66.8\% |
| Western | 3,005 | 1,160.8 | 42.4\% | 195.2 | 6.9\% | 80.7 | 2.7\% | 52.0\% |
| Southwestern | 2,983 | 1,592.9 | 57.8\% | 191.5 | 6.8\% | 92.8 | 3.1\% | 67.7\% |
| Southern | 2,748 | 1,507.4 | 59.3\% | 200.3 | 7.6\% | - 96.6 | 3.5\% | 70.4\% |

Note: The averages presented in this table are derived from averaging the time consumed by hour of the day and day of the week. Because of the variation in range from time block to time block they differ from the overall average. For example, for the Central District average all 168 of the time blocks results in an average of 52.6 percent time consumed by calls for service. However, if just the total weekly staff hours are compared to the total weekly hours of calls for service time the average is 48.2 percent. Averages for each time block can be viewed in Appendix 13.7.
Sources: BPD Computer Aided Dispatch data, July 1, 2016 - June 30, 2017; and February 3-20, 2018 shift strength reports.

The percentage of police officer time consumed by calls for service varies in law enforcement agencies across the country. A particular target a police department sets depends on how it wants its police officers to spend their time. A department that uses special units for community engagement and problem solving may be willing to have police officers do little more than answer calls for service and conduct proactive policing such as vehicle stops, pedestrian checks and field interviews. That same department might be willing to have 60 percent or more calls for service time, 15 percent - 20 percent self-initiated time, and the remaining time left for community engagement or administrative activities. An agency that wants its police officers to have time for community engagement and problem solving, as part of regular police officer time, may set a target of 35 percent - 40 percent for calls for service

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time consumed. In Baltimore the total calls for service time consumed ranges from 52 percent in the Western District to 70.4 percent in the Southern District, with a nine-district average of 65.7 percent total time consumed.

A review of the individual District calls for service time consumed charts in Appendix 13.6 shows that BPD officers experience extremely busy periods in each district. However, times also exist when the workload is not overly heavy. The data does not show that Baltimore police officers are constantly and regularly running from call to call. While in some districts certain hours during the week do show that officers spend an average of over 100 percent of their time responding to calls for service, they are not the most common condition. ${ }^{155}$

### 4.3.3 Patrol Staffing Needs at BPD

The average hours spent on calls for service per district per week is derived from BPD dispatch data from July 1, 2016 through June 30, 2017. It measures the time spent by all police officers assigned to sector patrol on calls they were assigned. It includes primary and back-up units, and measures from the time the unit is dispatched by communications until the officer clears the call. Using dispatch data as discussed earlier, the PF was able to determine the level of demand for police services for each district.

To adjust for operational demands the analysis determined the average amount of time that an officer is unavailable for patrol duties. These reasons include instances when the employee is either not at work such as vacation or sick leave, or when working but unavailable for patrol duties such as in-service training. The list below identifies the major general categories of times that a police officer is not available. The average amount of time over the course of a year that an officer is available for patrol functions is 29.94 hours per week which is approximately 75 percent of a full-time officer and illustrated in Table 14.

- Vacation: Vacation time taken.
- Medical Leave/Sick Time: Sick and accident leave used for time off due to illness or injury.
- Holiday: Leave taken for a holiday.
- Training: ${ }^{156}$ Time spent in in-service training or at a related conference.
- Other: Other leave time taken, including compensatory leave, leave without pay, leave while on military duty, bereavement leave, and personal leave.

The analysis also requires that the amount of time available to handle calls for service be reduced by administrative functions such as reporting for duty, meal breaks, and ending shift. Baltimore Police Officers are scheduled for four ten-hour shifts per week for a total of 40 hours. On each shift, 40 minutes is dedicated to officer break time, ${ }^{157}$ and 40 minutes is consumed by

[^34]activities at the start and end of shift including moving equipment to patrol cars, completing reports and other end-of-shift administrative duties. This time equates to 1.33 hours per shift for a total of 5.33 hours deducted from the four shifts per week.

The calculations rely on BPD payroll data and pay codes. As such, the team attempted to account for all categories that would contribute to time officers would be unavailable for patrol. However, certain designations of officers unavailable for patrol duties used in the district do not necessarily have associated pay codes and are therefore not reflected in the analysis. For example, during the final review of this report, BPD personnel called to the PF team's attention the existence of "transitional vacancy" time. These are vacancies caused when an officer is suspended or otherwise relieved of patrol duties but are reassigned to conduct other duties. So, while they are not conducting patrol duties, they are still coming in to work at another assignment. While we attempted to account for these, some are not captured in the staffing rosters, nor are they tracked in pay roll data. Therefore, the PF team were not able to verify or analyze this data. However, according to BPD staff, the rate of this status could be significant could impact staffing numbers.

Workload requirements and officer availability are calculated by using department data. The remaining analysis requires a policy decision regarding the amount of undedicated time to perform self-initiated activity including community engagement. The ICMA/CPSM report recommends that no more than 60 percent of an officer's time should be spent handling calls for service, administrative time, and detailed assignments thus leaving 40 percent of an officer's time for priorities directed by the agency, specifically community policing, problem solving, and other self- or department-initiated activities. ${ }^{158}$

The analysis determined the department would need 910 full time officers assigned to district patrol for the 60 percent calls for service target which is the recommended goal. ${ }^{159}$ Current BPD staffing charts for each of the nine districts from December 2017 show that a total of 1,102 police officers are budgeted for sector patrol across the nine districts. However, only 809 positions are assigned.


Table 14: Recommended Dedicated Patrol Staffing Requirements

[^35]| District | Average Rate <br> Available <br> for Patrol <br> Duties of <br> Police <br> Officers <br> Assigned <br> to Sector <br> Patrol ${ }^{160}$ | Average <br> Hours <br> Available <br> for <br> Patrol <br> Duties <br> per <br> Officer <br> per <br> Week ${ }^{161}$ | Breaks <br> and <br> Shift <br> Change <br> per <br> Week ${ }^{162}$ | Average <br> Hours <br> Available <br> for Patrol <br> Duties <br> per <br> Officer <br> per Week <br> After <br> Breaks <br> and Shift <br> Change ${ }^{163}$ | Average <br> CFS <br> Hours in <br> the <br> District <br> per <br> Week ${ }^{164}$ | Officers <br> Needed if 60 percent of Time is Spent on Calls for Service (40 percent for COP, SI and commander assigned) ${ }^{165}$ | Actual Officers <br> Currently <br> Assigned to Sector Patrol ${ }^{166}$ | Budgeted Officers for Sector Patrol ${ }^{167}$ | Percentage <br> Difference <br> Between <br> Budgeted <br> and <br> Needed if <br> $60 \%$ of <br> Time is <br> Spent on <br> Calls for <br> Service ${ }^{168}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Central | 76.190\% | 30.48 | 5.33 | 25.14 | 1155.6 | 77 | 76 | 114 | 33\% |
| Eastern* | 77.392\% | 30.96 | 5.33 | 25.62 | 1280.2 | 83 | 91 | 112 | 26\% |
| Northeastern | 75.619\% | 30.25 | 5.33 | 24.91 | 2063.9 | 138 | 109 | 160 | 14\% |
| Northern | 71.917\% | 28.77 | 5.33 | 23.43 | 1572.1 | 112 | 78 | 123 | 9\% |
| Northwestern* | 74.569\% | 29.83 | 5.33 | 24.49 | 1433.6 | 98 | 85 | 114 | 14\% |
| Southeastern | 70.837\% | 28.33 | 5.33 | 23.00 | 1596.9 | 116 | 95 | 116 | 0\% |
| Southern | 74.889\% | 29.96 | 5.33 | 24.62 | 1507.4 | 102 | 83 | 125 | 18\% |
| Southwestern | 73.659\% | 29.46 | 5.33 | 24.13 | 1592.9 | 110 | 98 | 121 | 9\% |
| Western | 77.687\% | 31.07 | 5.33 | 25.74 | 1160.8 | 75 | 94 | 117 | 36\% |
| Citywide* | 74.850\% | 29.94 | 5.33 | 24.61 | 13363.4 | 910 | 809 | 1,102 | 17\% |

*Note: Eastern and Northwestern district average rates of time available for patrol were edited down to reflect the rates that would have occurred had officers attended their full 80 hours of in-service training.
*Note: The Citywide total reflects the edited district average rates of time available for patrol.
Sources: BPD Computer Aided Dispatch data, July 1, 2016-June 30, 2017; BPD payroll leave data, January 1, 2017-
December 31, 2017; and lists of officers and their rank who were assigned to each district in January 2017 and
December 2017.
It is a common practice to temporarily transfer a police officer to another assignment for department needs or career development. The staffing requirement in Table 14 above does not take into consideration absences for being detailed to another unit. In this case, although the officer is permanently assigned to patrol for budget purposes, the officer is functionally
${ }^{160}$ BPD payroll leave data, January 1, 2017-December 31, 2017; and lists of officers and their rank who were assigned to each district in January 2017 and December 2017. Source tables for these rates are available in Appendix 13.7.
${ }^{161} 40$ hours of work per week $x$ each district's average rate available for patrol duties of police officers assigned to sector patrol.
${ }^{162}$ Eighty minutes of officer time per shift for breaks and shift change = Approximately 5.33 hours per week per officer that they are additionally unavailable for patrol duties.
${ }^{163}$ Average Hours Available for Patrol Duties per Officer per Week - Breaks and Shift Change per Week. Numbers shown have been rounded to the nearest hundredth decimal place.
${ }^{164}$ BPD Computer Aided Dispatch data, July 1, 2016-June 30, 2017. The Citywide number is shown as to provide a sum of the average CFS hours from each district and not the overall city average.
${ }^{165}$ (Average CFS Hours in the District per Week / Average Hours Available for Patrol Duties per Officer per Week After Breaks and Shift Change) / 60 percent.
${ }^{166}$ December 2017 staffing charts for each district. As actual counts of officers assigned can vary over time, in August these numbers were checked against BPD’s "Patrol Strength Report 8-9-18" for general consistency.
${ }^{167}$ Ibid.
${ }^{168}$ (Budgeted Officers for Sector Patrol - calculated Officers Needed if 60 percent of Time is Spent on Calls for
Service) / Budgeted Officers for Sector Patrol.
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assigned to another unit or another detail and is unavailable for patrol duties. The BPD was unable to provide the PF team with accurate transfer data to be included in the staffing requirements.

The department should also ensure that supervisor to officer ratios in the districts remain approximately six or eight to one (6-8:1) even when the number of police officers increases to budgeted levels.

### 4.3.4 BPD Sector Patrol Vacancies

While staff vacancies are common in large police departments for a variety of reasons, the distribution of those vacancies across the department can be telling. Below are two tables that show the percentage of vacancies across the department.

Table 15 below shows BPD vacancy distribution throughout the ranks. Based on this, the greatest percent of vacancies is in the civilian ranks and the greatest number of vacancies at the rank of police officer.

Table 15: BPD Vacancy Rates by Position

|  | Budgeted | Actual | \# <br> Vacancy | \% <br> Vacancy |
| :---: | :---: | :---: | :---: | :---: |
| SWORN |  |  |  |  |
| Commissioner | 1 | 1 | 0 | 0\% |
| Deputy Commissioner | 3 | 3 | 0 | 0\% |
| Chief | 4 | 4 | 0 | 0\% |
| Inspector | 2 | 2 | 0 | 0\% |
| Major | 20 | 20 | 0 | 0\% |
| Captain | 16 | 16 | 0 | 0\% |
| Lieutenant | 109 | 109 | 0 | 0\% |
| Sergeant | 349 | 345 | 4 | 1\% |
| Police Officer | 2342 | 2026 | 316 | 13.5 |
| Total Sworn | 2846 | 2526 | 320 | 11.2\% |
|  |  |  |  |  |
| CIVILIAN |  |  |  |  |
| Chief | 5 | 4 | 1 | 20.0\% |
| Director | 14 | 11 | 3 | 21.4\% |
| Civilian Personnel | 489 | 415 | 74 | 15.1\% |
| Civilian Total | 508 | 430 | 73 | 14.4\% |

Source: BPD end of year reports 2013-2018, December 31, 2017.
Table 16 below shows the number of police officer vacancies across the department, comparing police officers assigned to sector patrol to those assigned elsewhere in the department. The vacancy rate for police officers assigned to sector patrol is 26.6 percent while police officer vacancies for the rest of the department is under 2 percent. The vacancy rates for police
officers indicates that BPD appears to give the least importance and value to patrol services when it comes to filling vacancy.

Table 16: BPD Vacancy Rates for Sworn Officers

|  | Total <br> Officers | Sector <br> Patrol | Non-Sector <br> Patrol |
| :--- | ---: | ---: | ---: |
|  |  |  |  |
| Budget | 2342 | 1102 | 1240 |
| Actual | 2026 | 809 | 1217 |
| Vacancy | 316 | 293 | 23 |
| Vacancy Rate | $13.5 \%$ | $26.6 \%$ | $1.9 \%$ |

Note: As actual counts of officers assigned can vary over time, in August 2018 these numbers were checked against BPD's "Patrol Strength Report 8-9-18" for general consistency.
Source: BPD end of year reports 2013-2018, December 31, 2017.
If the department wishes to adopt the recommended sector patrol staffing of 910 police officers, it must prioritize patrol by ensuring there is adequate dedicated police officers assigned to sector patrol to meet the recommended 910, plus additional officers to allow for temporary transfers away from sector patrol.

All recommendations for patrol staffing are consolidated at the end of the following chapter, (Chapter 5: Additional Considerations for Patrol Staffing).

## 5 Additional Considerations for Patrol Staffing

As previously discussed, police department leadership must consider a myriad of information and input when making staffing decisions. In addition to the workload analysis above, this chapter discusses current BPD policy on determining minimum staffing requirements, community input on service expectations, police officer input, and the impact of consent decree requirements on BPD patrol staffing.

### 5.1 BPD Policy - Minimum Staffing 'Constant,' Shift Strength, Overtime \& Drafting

The BPD, similar to other departments, uses a department-determined minimum staffing level when making patrol staffing decisions. Department Patrol Staffing Shortages Policy 819 states, "[i]t is the policy of the Baltimore Police Department (BPD) to ensure minimum staffing requirements are maintained to safeguard the citizens of Baltimore and members of the BPD. Supervisors must evaluate staffing well in advance to reduce overtime costs and the frequency members are required to work beyond their normal tour of duty." 169

[^36]When staffing levels for a particular shift fall below the determined minimum level, vacancies are filled using overtime or drafting. While the requirement to meet "minimum staffing" (also referred to as the "constant") is identified in policy, neither the definition of what constitutes minimum staffing nor the method to determine minimum staffing is documented. The percentage of shifts filled by regularly scheduled officers ranges from a low of 56 percent in the Northern District to a high of 81 percent in the Eastern District. Overall, approximately 70 percent of patrol shifts are staffed by regularly scheduled officers (officers not on overtime).

Although occasional unexpected vacancies will need to be filled through overtime, the consistent 30 percent vacancy rate indicates patrol is not able to meet the needs of responding to calls for service and self-initiated activity within the community. This indicates that while the number of budgeted police officers assigned to sector patrol is adequate, the deployment of police officers in the districts should be re-evaluated, as does the 'constant.' These are policy and leadership decisions necessary to make patrol a priority.

The method currently used to calculate sector patrol staffing needs for the BPD is done by using 'Shift Strength Reports'. These reports show the minimum staffing required for each shift in each district. They list the number of full duty officers scheduled to fill the required positions, the number of officers who volunteered to work overtime to fill required positions, and the number of officers who had to be drafted in order to fill the required positions. The table below summarizes shift strength reports from April 1, 2018 through May 31, 2018.

Table 17: Staffing Summary from Shift Strength Reports

| District | Total <br> Minimum <br> Required <br> Shifts | Shifts Filled <br> by Scheduled <br> Full Duty <br> Officers | Percentage of <br> Shifts filled by <br> Scheduled Full <br> Duty Officers | Shifts Filled <br> by Officers <br> on Overtime | Percentage <br> of Officers <br> on Overtime | Shifts <br> Filled by <br> Drafted <br> Officers | Percentage <br> of Drafted <br> Officers |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Central | 2,191 | 1,475 | $67.3 \%$ | 466 | $21.3 \%$ | 237 | $10.8 \%$ |
| Eastern | 2,356 | 1,891 | $80.3 \%$ | 422 | $17.9 \%$ | 50 | $2.1 \%$ |
| Northeast | 2,988 | 2,022 | $67.7 \%$ | 480 | $16.1 \%$ | 484 | $16.2 \%$ |
| Northern | 2,612 | 1,578 | $60.4 \%$ | 900 | $34.5 \%$ | 130 | $5.0 \%$ |
| Northwest | 2,549 | 1,769 | $69.4 \%$ | 684 | $26.8 \%$ | 95 | $3.7 \%$ |
| Southeast | 2,442 | 1,813 | $74.2 \%$ | 518 | $21.2 \%$ | 95 | $3.9 \%$ |
| Southern | 2,577 | 1,998 | $77.5 \%$ | 393 | $15.3 \%$ | 163 | $6.3 \%$ |
| Southwest | 2,502 | 1,730 | $69.1 \%$ | 514 | $20.5 \%$ | 291 | $11.6 \%$ |
| Western | 2,593 | 1,661 | $64.1 \%$ | 792 | $30.5 \%$ | 139 | $5.4 \%$ |
| Citywide | $\mathbf{2 2 , 8 1 0}$ | $\mathbf{1 5 , 9 3 7}$ | $\mathbf{6 9 . 9 \%}$ | $\mathbf{5 , 1 6 9}$ | $\mathbf{2 2 . 7 \%}$ | $\mathbf{1 , 6 8 4}$ | $\mathbf{7 . 4 \%}$ |

Source: BPD Shift Strength Reports - April 1 - May 31, 2018.

### 5.2 Input from Focus Group of Police Officers

${ }^{170}$ It should be noted that drafted officers are also paid overtime.
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On April 16, 2018, representatives of the Monitoring team held their monthly meeting with BPD police officers. The Monitors and the PF staffing study team collaborated to focus the discussion of the meeting on BPD staffing to ensure that the team gained the perspective of the officers from the focus group. The focus group included nine BPD officers of varying ranks, assignments, and demographics.

## Internal Procedural Justice.

It is important to note that organizational systems help to set the framework for the culture of the organization. How this framework is structured can inform the level of internal procedural justice present. Internal procedural justice has also been shown to significantly impact the way police officers and other departmental staff treat the community. One study confirmed this, finding that,
"Just as we measure internal organizational success by employee adherence to rules, we measure external operational success through crime rates and arrest statistics. We do both to the detriment of building trust and legitimacy, because they ignore what the research tells us and what the public and the rank and file tell us. Both the public and rank-and-file officers want to be treated fairly by those in authority. We should not be surprised that we end up with poor morale among our officers echoed by the lack of trust from the community.
"Perhaps ironically, our results emphasize that to a large degree officers want from their organization the same thing that citizens want from officers: to be treated with respect in an honest and fair manner by those around them. It appears that if we want to change the climate between citizens and the police, a good place to start is by changing the climate within police departments. Such changes will go a long way toward creating more efficient police departments and happier officers more open towards the kind of policing that produces positive and mutually beneficial relationships with the public."

Quotes From: Rick Trinker; Tyler, Tom; Goff, Phillip Atiba. "Justice from Within: The relations between a procedurally just organizational climate and police organizational efficiency, endorsement of democratic policing, and officer well-being." Psychology, Public Policy \& Law. 22(2):158-172, May 2016. Viewed online August 8, 2018 at https://insights.ovid.com/psychology-public-policy-law/pppol/2016/05/000/justice-within/3/00043965

The discussion began with an introduction by each officer. The PF team members then asked, "How is your time typically allocated during your shift?" The members of the focus group discussed the amount of time they spend on calls for service and noted that it varies greatly from call to call. They also discussed that they believe that at times there is confusion between call takers (who work for both Baltimore Fire and Police) and officers about how to code a call. This means that while an officer may think they are arriving to a call that is coded as one type of call in CAD and then determine that it may be completely different once they get to the call location.

Officers also discussed the 'Tactical Alert' designation, stating that while there seems to be no official policy on this, they can be put on "Tactical Alert" by any shift commander at any time. The alert allows dispatch to hold priority 3 and 4 calls and only dispatch priority 1 and 2 calls. There was debate as to whether there was an actual policy. The purpose of tactical alert is to allow shift commanders to respond to hot spots and quell them.

PF team members then asked the focus group to discuss drafting. The sentiment from the group was decidedly negative. They discussed that the practice, used regularly in the districts to keep staffing levels adequate, erodes the quality of service provided, and hurts officer morale. The group perceived that the department chooses to staff specialized units, leaving patrol units in the districts to deal with being drafted to cover calls for service and presence in Baltimore neighborhoods.

The officers also discussed that span of control in the districts is insufficient, with one officer calling it 'atrocious.' They stated that many processes that have been put in place that are not responsive to supervision in the districts and that supervisors are overloaded. In addition, those supervisors who have access to and know how to use MDTs (some do not) in the districts are able to monitor CFS and response by police officers, but many cannot.

Finally, PF team members asked focus group participants about minimum staffing requirements in the districts, or the "constant." Through the course of the staffing study, the PF team has encountered the use of a number used by the department that represents the number that is required in each district-called the constant. They indicated that the constant was originally developed based on district geography so that all "posts," (or beats) in the district were continually and adequately staffed. When a former commissioner eliminated posts throughout Baltimore (in early 2015), the constant was revised based on workload data, by several BPD patrol lieutenants. Since that time, the post boundaries have been reinstituted.

The constant-the required minimum number of officers to be on duty-varies within a district by shift. Therefore, the number will be higher on historically busier shifts. According the focus group, if a district cannot meet the constant number with full duty scheduled officers the shift commander is obligated to fill vacancies with overtime and drafted officers.

### 5.3 Community Expectations of Police Service from BPD

The PF team wanted to determine what the Baltimore community's expectations were on BPD response to calls for service as a way to inform service goals for the department. To do so, in early 2018, BPD created a customer service survey to gather the input of community members on their service expectations of BPD. Results from the survey are intended to serve as a baseline for customer service feedback in anticipation of future changes.

BPD began releasing surveys in hardcopy in April 2018 and released an online version shortly thereafter. They received responses from approximately 400 respondents. The following describes some of the results. The full survey and results can be found in Appendix 13.8.

The first questions of the survey asked respondents what they expected the appropriate response to be when a 911 call is placed to BPD. Question number 1 asked how long it should take for the 911 line to be answered. Eighty three percent ( $83 \%$ ) of respondents said they
expected that it should be answered in under 20 seconds, and 100 percent of respondents said those called should be answered in under a minute.

The survey then asked respondents' expectation of the time it should take for the BPD to respond to serious crimes, like shootings, aggravated assaults or robbery? Approximately 67 percent of the responding community members said BPD response to these calls should be in under five minutes, while 32 percent said they should respond in 5-10 minutes. Comparatively, per Figure 7 above, BPD currently responds to Priority 1 calls in approximately 16 minutes.

Figure 8: Survey Question 2
What is your expectation of the time it should take for the BPD to respond to serious crimes, like shootings, aggravated assaults, or robbery? (400 responses).


- Under 5 Minutes $\quad$ 5-10 Minutes $\quad 10-15$ Minutes

The next question asked about expectations for BPD response to serious crimes. Approximately 91 percent of respondents expect that BPD would respond to these in under 20 minutes. Approximately 44 percent of those responded that the response should be under 10 minutes and 47.5 percent thought these calls should be answered in 10-20 minutes. Comparatively, per Figure 7 above, BPD currently responds to Priority 2 calls in 24 minutes.

Figure 9: Survey Question 3

> What is your expectation of the time it should take for the BPD to respond to calls such as neighbor/family disputes, missing persons, suspicious persons, or drug activity? (400 responses).


■ Under 10 Minutes ■ 10-20 Minutes $\quad$ 21-25 Minutes

Question Four of the survey asked about respondents' expectation for police response times to property crime. Forty-three percent (43\%) of respondents said the department should respond in under 15 minutes and another 34 percent said they should respond between 16 and 25 minutes. Comparatively, per Figure 7 above, BPD currently responds to Priority 3 calls in 33 minutes.

Figure 10: Survey Question 4
What is your expectation of the time it should take for the BPD to respond to calls such as destruction of property, larceny, or auto theft? (400 responses).


■ Under 15 Minutes ■ 16-25 Minutes $\quad$ 26-35 Minutes

The next set of questions in the survey were designed to determine which methods community members want to file a police report with BPD - by filing a report with an officer in person at
the scene, with an officer at police headquarters, through a report made via telephone, or one made online. The vast majority of respondents prefer a police officer to respond to their home for a residential and business burglary, car break-in, and simple assaults. Comparatively, per Figure 7 above, BPD currently responds to Priority 4 calls in 37 minutes. Notably, in all cases, respondents considered coming to police headquarters to file a report the least preferable option.

Figure 11: Survey Question 5 - Residential Burglary

Residential Burglary


Figure 12: Survey Question 5 - Business Burglary


Figure 13: Survey Question 5 - Car Break-In

Car Break-In


Figure 14: Survey Question 5 - Simple Assaults

Simple Assaults


The survey then asked if after a property crime report has been filed, whether community members would like to receive notification of receipt and status of their case, and how they would like to receive that notification. Approximately 99 percent of respondents said that they would like to receive notification of receipt and status about their case, and 71 percent said they wanted to receive that information electronically, via email, while 15 percent wanted to receive it by mail and 11 percent wanted receipt and status by telephone.

Figure 15: Survey Question 7

```
If so, how would you like to receive notification of receipt and status of your
case?
(398 responses).
```



```
- Do Not Need Notification ■ By Telephone
- By Email - By US Mail
```

Question 8 of the survey asked how long it should take to provide a copy of the police report. Fifty-five percent (55\%) of respondents also reported that they expect to receive a police report within two business days after request.

Figure 16: Survey Question 8

Currently, it can take up to 10 business days (and $\$ 10$ ) from time of request to obtain a copy of a crime report. Upon your request as a victim, how long do you think it should take a Police Department to provide you with a copy of your crime report?
(400


■ 2 Business Days ■ 1 Week ■ 2 Weeks $■$ 2-4 Weeks

The final questions of the community expectations survey focused on community policing at BPD. It asked if community members were interested in seeing more community policing and community engagement by police in Baltimore? Approximately 98 percent of respondents responded that they would. When asked what type of strategies they would like to see employed, community members prioritized courteous and respectful engagement with officers and foot patrols.

Figure 17: Survey Question 10

## If yes, what type of policing strategies would you want to see?

(Multiple responses).


Respondents also prioritized crime prevention / reduction and violence reduction as important community interests.

Figure 18: Survey Question 11
Community priorities are important to the Baltimore Police Department. Please select up to 5 of the potential priorities that you deem the "Highest Priority".


Respondents listed crime prevention/reduction strategies and increased officer staffing levels responding to calls for services as initiatives they wanted to see pursued to improve services in Baltimore.

Figure 19: Survey Question 12
What initiatives would you like to be pursued in the Baltimore Police Department to improve services to the community? (Multiple responses).


The responses to the community survey are essential to better understand customer (community) expectations and should be taken into consideration when creating department priorities and making staffing decisions. Currently, BPD's response to calls for service (see analysis in Chapter 4.2 of this report) and other services provided fall well short of the level of service expected by the community.

Part of BPD's core mission is to, "commit to creating and maintaining a culture of service that builds trust and legitimacy in all communities." Accomplishing this will require on-going dialogue and problem solving in collaboration with the community about ways to best meet their expectations, strengthen communication and build relationships with community members. It will also require that BPD make service delivery and the community's expectations into account when developing staffing going forward. Ensuring that the department is appropriately staffed, and that its business processes are effective and efficient, is critical to accomplishing its mission.

### 5.4 Impact of the Consent Decree on Patrol Staffing

Paragraph 428 of the consent decree mandates that the BPD complete "a comprehensive staffing study to assess the appropriate number of sworn and civilian personnel to perform the functions necessary for BPD to fulfill its mission, enable supervision, and satisfy the requirements of this Agreement."

Paragraph 429 obligates the BPD to develop a Staffing Plan that provides for "Personnel deployment to ensure effective community and problem-oriented policing," and for "a sufficient number of officers in patrol in each district, without needing to resort to drafting, except in unforeseeable circumstances."

Paragraph 17 requires the BPD to "encourage patrol officers to be familiar with the geographic areas they serve, including their issues, problems, and community leaders; engage in problem identification and solving activities with the community members around the community's priorities; and work proactively to address quality-of-life issues in a manner that minimizes stops, Citations, searches, arrests, and use of force consistent with the requirements of this Agreement." ${ }^{171}$

A key component of staffing to meet the goal of community policing in Baltimore is having the "right" number of officers assigned to sector patrol. This means having police officers in each of the nine police districts in sufficient quantity to respond to calls for service, conduct proactive policing in support of anti-violence initiatives and engage the community. According to community policing literature, "[u]nder community policing, this substantial resource of free patrol time is devoted to directed enforcement activities, specific crime prevention efforts, problem solving, community engagement, citizen interaction or similar kinds of activities." ${ }^{172}$ Police officers assigned to sector patrol should have sufficient time to meet the following elements of community policing patrol.

- Regularity of assignments, working the same sector and post consistently so they take ownership of their area and get to know the community, neighborhood, and the people in their area.
- Communicate with other officers who work the same area across days off and across shifts.


### 5.5 Patrol Staffing Recommendations

Recommendation 1: The City of Baltimore should ensure that budgeted police officer positions for sector patrol are not frozen and are available for BPD to fill up to the budgeted level. The stopping and starting of providing available funding to hire new BPD police officers can inhibit the flow of viable candidates from entering the BPD recruitment and hiring process. This has ramifications for the hiring process that can continue for years.

Recommendation 2: BPD should work to prioritize the patrol function and reduce the vacancy rate in district patrol as soon as possible. In the short term this means identifying ways to put police officers into the districts to cover shifts as opposed to pulling them out for details, administrative, or other assignments. Additionally, smoothing police officer vacancies across the organization will increase the number officers assigned to patrol functions and reduce the need for overtime and drafting. In the long term, they should work to fill budgeted patrol positions as soon as possible at least up to the recommended level of 910 , but preferably up to the full budgeted level through increased efforts to recruit and hire qualified police officers.

[^37]Recommendation 3: BPD should review and revise all departmental policies pertaining to patrol staffing.

- BPD should ensure that staffing related terms are clearly and consistently defined in policies. Specifically, in Policy 819, ‘Department Patrol Staffing Shortages,' should clearly and specifically define patrol officer, patrol shortages, minimum levels of service, etc. Other definitions to be defined should include authorized, frozen, budgeted and funded positions.
- The department should also clearly document its process for development of minimum staffing 'constants.' This information is necessary to ensure that it is understood across the department and allows for the measurement of impact of reduced service delivery. All definitions, policies, procedures and practices in studying staffing should be documented and placed in a shared location for transparency of staffing decisions.
- BPD should develop, define and codify minimum patrol daily staffing number. They should re-allocate officers into patrol to meet this daily staffing number as soon as possible and ensure policy exists to keep these officers working patrol. This number should ensure officers can respond to calls for service and allow time for other community policing, problem solving and self-initiated tasks.

Recommendation 4: BPD should define and maintain clear policies and processes to track and document the exact assignment and location of staff. While conducting this workload analysis, the PF team needed to supplement payroll / personnel data with shift strength reports, staffing rosters and other reports to piece together assignments and locations of police officers assigned to sector patrol. This information should be maintained in one data system for ease of analysis.

- BPD should complete a review of all police officer positions and duties in sector patrol to determine how many police officers are actually working patrol functions (responding to calls for service and other proactive policing) on a daily basis vs. performing other functions.

Recommendation 5: BPD should conduct an audit of call-taking and dispatch processes to ensure that communications staff and officers are adhering to policies and procedures, and that those policies and procedures meet national standards and contribute to transparent data collection. As part of this process, the BPD should conduct focus groups with representative groups of BPD officers and communications staff to assist in identifying ways to improve call-taking and dispatch service.

- BPD should conduct a full review of call-taking and dispatch priorities, policies, and protocols. This should include reviewing and updating the more than 600 call type codes currently used, call priorities, and requirements for officers to report status. As an example, silent alarm calls are received frequently and are coded as a priority 1 calls. However, some in the department report that since these are typically false alarms, officers may not respond as they would to a priority 1 call.

Recommendation 6: BPD should identify business processes and staffing strategies that can reduce the use of sworn officers performing administrative duties as soon as possible. This should include business process mapping throughout the department and a comprehensive civilianization study.

Recommendation 7: BPD should develop strategies to reduce call volume for police officers assigned to sector patrol, both online and telephonic reporting as soon as possible. This may include the increased use of 311 and other city service lines or the use of civilian staff to take on duties that do not require a police officer.

Recommendation 8: BPD should re-engineer response strategies to improve efficiency in response to calls for service as soon as possible. This may include reviewing and re-prioritizing calls for service, using differential response units, establishing city laws that assess fees for frequent users of 911 , such as, businesses and other reoccurring calls, and identify ways to streamline processes like the 'no calls.' While none of this will eliminate the need for more officers but might decrease time demand.

Recommendation 9: BPD should collect consistent, validated data necessary for completing thorough and comprehensive staffing studies on a regular basis. Policies and technology should be put into place to ensure that validated, consistent data is collected and kept in a way that it can be accessed and analyzing without manipulation.

Recommendation 10: BPD should analyze variations in districts' response times to determine causes for slower or faster response times within and across districts. This analysis should include exploring the many variables that can impact response time to include district geography, logistics, traffic patterns, crime rates and types, etc.

- Using this information, the BPD should complete an evaluation of district / post boundaries to ensure that the boundaries create the most efficiencies in providing policing services to the city of Baltimore.

Recommendation 11: BPD should study and revise patrol deployment and shift strategies in light of community policing requirements under the consent decree. Strategies should support community partnerships and problem solving.

Recommendation 12: BPD should use best practices to maximize and regularly measure and assess officer discretionary time.

Recommendation 13: Response to calls for service time should be examined during weekly Comstat to identify challenges and ensure accountability for response in each of the districts. Goals for response times should be defined, informed by community survey and police officer input, by the Police Commissioner.

Recommendation 14: BPD should continue workload analysis and deployment / allocation studies on an annual basis using national best practices, while reform efforts are on-going, to
ensure that staffing levels continue to address community needs. These studies should continue on a regular basis thereafter approximately every three to five years.

- A cadre of BPD staffing subject matter experts should be tasked with conducting regular, evidence-based analysis of BPD staffing.
- The process used should not only include a workload analysis, but also community input, police officer input, consideration of department priorities, and other relevant information to inform a comprehensive study.
- BPD should consider establishing a 'Research and Planning,' or similar unit that is staffed with academic and research staff who are able to support evidence-based studies throughout the organization and assist in planning efforts. This unit should regularly partner with local universities to leverage academic skillsets and resources to develop data-supported strategies to solve problems and study issues in the organization.


## 6 Analyses of Baltimore Police Investigations Staffing

BPD's investigative units serve as critical components of the work done by the department. The PF team examined caseload data from the following investigative sections and units for this analysis:

- Homicide Section
o Homicide Unit
o Citywide Shootings Unit
- Special Investigations Section (SIS)
o Arson Unit
o Economic Crimes Unit
o Family Crimes Unit
o Missing Persons Unit
o Child Abuse
o Animal Abuse
- Citywide Robbery and District Detective Section
o Robbery Units
o Burglary Units


### 6.1 Methodology \& Data

The PF team intended to conduct a workload analysis, and so requested caseload, case time, and staffing level information from each investigative unit for the year 2017. Since staffing information fluctuated over time, particularly as units were reorganized, the assessment team used staffing charts from April 30, 2018. As in the patrol workload analysis, to evaluate investigative staffing based on current caseload, the PF team also requested payroll data from the units from January 1, 2017 through December 31, 2017 with leave codes.

The PF team also requested lists of officers assigned to each unit in January and December of 2017 to be able to generate lists of officers who worked in investigative units for the entire year. After considerable cleaning, this data provided the average amount of time over the course of a year that officers are available for investigative duties.

Unfortunately, BPD does not keep track of case time information or use a formal solvability system that would help to categorize and estimate the time required to fully investigate cases. Thus, in the analysis section, the PF team attempted to use proxy data from past staffing studies—namely a 2008 staffing study of the San Francisco Police Department ${ }^{173}$ and 2012 staffing study of the Austin Police Department ${ }^{174}$ — which were selected based on their comparability as large departments and availability of comparative information.

For the homicide section, the PF team did use best practice ratios to estimate homicide unit staffing. Drawing primarily from the Bureau of Justice Assistance report Homicide Process Mapping: Best Practices for Increasing Homicide Clearances by Dr. Carter, the assessment team estimates best practice staffing targets for homicide detectives working active cases based on BPD homicide caseload in the homicide workload analysis section below.

For all of the other investigative units, however, after considerable work by the PF team to make the Austin and San Francisco data work as proxies for actual BPD case investigation time, the team came to understand that too many variables impact how long it takes to investigate a case to use data from just two other police departments in place of actual BPD time data. The team simply was not comfortable with any analysis that did not use Baltimore-specific data.

Were BPD to document and use unit-specific case time organized by solvability factors information, the department could conduct an accurate analysis using the caseload and case time methodology in the future. However, the analysis and information displayed here can begin to provide a better understanding of staffing areas of concern.

### 6.2 Homicide Section

The BPD Homicide Section is commanded by a major. It has two rotating shifts of homicide detectives - A and B - each headed by a lieutenant. Each shift is composed of four squads supervised by a sergeant; when at full strength, each squad is comprised of six detectives. The homicide section is staffed 24 hours a day.

[^38]As of April 30, 2018, each of these squads had at least one vacancy, with A squad at 19 detectives and $B$ squad at 20 detectives. ${ }^{175}$ In addition to homicide cases, the homicide unit may be assigned additional cases. In 2017, the section handled:

- 339 homicide cases ( 343 victims);
- 882 cases involving questionable deaths, suicides, suspicious deaths, and overdoses;
- one abduction;
- seven police involved shootings;
- two aggravated assaults;
- four threats on police;
- five non-fatal shootings;
- 42 shootings with homicide victims; and
- one robbery. ${ }^{176}$

Additionally, the Homicide Section had five units grouped under Cold Case, led by a lieutenant. These units, each supervised by a sergeant, included:

- a Cold Case Unit with four detectives that may be assigned to new homicide and shooting cases;
- an Operations Unit with six detectives that locates witnesses and suspects;
- an Overdose Task Force with six detectives that was formed in 2017 and investigates drug overdose deaths and aims to prosecute involved drug dealers for murder;
- Administrative Unit with two detectives and two civilian staff persons; and,
- the Medical Examiner's Office with one sergeant assigned.

The Section had two detectives detailed out and one detective on medical leave. ${ }^{177}$

While a growing number of agencies across the country have established and funded cold case investigative units over the last few decades, agencies vary widely in how they administer, staff, organize, and resource these units. A 2011 RAND study using a national law enforcement survey with 1,051 respondents found that cold case units are found almost exclusively in larger agencies, with 18 percent of agencies that have 100 or more sworn officers having dedicated cold case units, primarily focused on homicide cold cases. Generally, the number of cold case investigators varies, and detectives may switch between active and cold case investigations, as BPD cold case detectives are assigned. ${ }^{178}$

## Citywide Shootings

[^39]Citywide Shootings handles all contact shootings and cases involving shootings as well as other types of cases assigned. ${ }^{179}$ Citywide Shootings is composed of two shifts—A and B shift—each led by a lieutenant. Each shift has three squads and each squad is led by a sergeant.

As of April 30, 2018, almost all of these squads had one vacancy, with $A$ squad at 13 detectives, one of whom is limited duty, and B squad at 13 detectives, leaving the section with four detective vacancies. ${ }^{180}$

In 2017, Citywide Shootings handled 565 shooting cases ( 662 victims), 62 self-inflicted shootings, 26 aggravated assault by shooting, four robberies, and 13 aggravated assaults. ${ }^{181}$

### 6.3 Special Investigations Section



The Special Investigation Section (SIS) is commanded by a major and is composed of the:

- Arson Unit,
- Economic Crimes,
- Family Crimes Unit,
- Missing Persons Unit.
- Sex Offense Unit and Sex Offense Cold Case Unit,
- Child Abuse Unit,
- Sex Offense Registry Unit,
- State Attorney's Unit, and
- Animal Abuse Unit.

Each of these units is typically headed by a sergeant, with lieutenants supervising multiple units. Of these units, this analysis focuses on the units with the most available and comparative data to conduct an analysis.

## Arson Unit

The BPD Arson Unit investigates cases that have been ruled arson by the City Fire Investigation Bureau (FIB). As of April 30, 2018, the Arson Unit had four detectives. ${ }^{182}$ The unit worked 169 cases in 2017. ${ }^{183}$ The unit is currently working to form a partnership with ATF to create an ATF Arson Task Force, which would have access to more resources so that cases could be resolved more quickly. ${ }^{184}$

[^40]
## Economic Crimes Unit

Economic Crimes Unit investigates larger financial cases, normally involving values over $\$ 10,000$. Investigations require access and tracking of bank and other financial records, which can take an extended period of time to review. In addition to these lengthy investigations, unit members also assist victims on credit card thefts to provide advice on next steps and to confirm that victims have filed a police report on the loss. They also assist Missing Persons and other units with financial work-ups as part of an investigation. ${ }^{185}$

As of April 30, 2018, the Economic Crimes Unit had two detectives and a Community Service Officer (CSO), ${ }^{186}$ which is an administrative position that performs clerical and administrative tasks. ${ }^{187}$ In 2017, the unit worked 105 cases. ${ }^{188}$

## Family Crimes Unit

The Family Crimes Unit primarily handles domestic violence cases, as well as some other familyrelated crimes like elder abuse. The unit is led by a lieutenant and includes two investigative squads, each supervised by a sergeant. As of April 30, 2018, with 18 budgeted detective positions, ${ }^{189}$ Squad A had five detectives, one of whom was limited duty, and Squad B had three detectives, leaving eleven vacancies. The unit also employed five civilians including one Office Supervisor (OS), two Community Service Officers (CSOs), and two Contract Specialists (CWs). ${ }^{190}$ Detectives cover day and evening shifts, and one detective works the midnight shift. The unit works out of the Baltimore Child Abuse Center and is co-located with House of Ruth representatives, an umbrella non-profit domestic violence service provider. ${ }^{191}$

In 2017, the unit handled 9,518 cases. ${ }^{192}$ These are cases where a family violence detective responds to scene or hospital at the request of the patrol unit. Detectives and civilian staff manually enter approximately 15,000 domestic violence reports into the case management system a year. A two-month backlog on entry currently exists. The unit spends approximately $\$ 5,000$ a month in overtime for data entry in this unit alone. Each detective enters information when he/she is assigned a case for follow-up.

[^41]Additionally, the unit reviews all domestic violence lethality assessments. Personnel attempt to re-contact victim if the House of Ruth representatives cannot make contact. ${ }^{193}$

## Missing Persons Unit

The Missing Persons Unit handles cases where the missing person is under 13 years old, considered a vulnerable adult, and when an adult is missing under suspicious circumstances. Missing youth cases between 14 and 17 are handled by patrol unless there are suspicious circumstances or human trafficking is suspected. ${ }^{194}$

The Unit is headed by a lieutenant (who also supervises the Sex Offender Registry Unit) and one sergeant. As of April 30, 2018, the Unit consisted of five detectives and a civilian case manager. ${ }^{195}$ The unit covers the day and the evening shift, and the midnight shift is covered by an on-call system. ${ }^{196}$

In 2017, the unit worked 484 cases. ${ }^{197}$

## Sex Offense Unit

BPD's Sex Offense Unit investigates first-degree rape, second-degree rape, and third-degree sex offense cases. $4^{\text {th }}$ degree sex offense cases are handled by Patrol. Led by a lieutenant, as of April 30, 2018, Sex Offense is organized into three squads-A, B, and C-in addition to one Cold Case squad. Each squad is supervised by a sergeant. Squads A, B, and C each had three to four detectives for a total of 11 detectives. ${ }^{198}$ The Cold Case squad had two detectives and one civilian case manager who handle both Sex Offense and Sex Offense Cold Case files. ${ }^{199}$ The Cold Case squad follows up on old matches in the Combined DNA Index System (CODIS) as approximately 89 percent of sexual assault forensic evidence (SAFE) kits are tested by the lab. The Cold Case squad also receives open cases when an active sex offense detective is transferred or leaves one of the other Sex Offense squads. ${ }^{200}$

In 2017, the Sex Offense Unit handled 322 cases. ${ }^{201}$ Currently, cases are not triaged or screened based on solvability. Squads A, B, and C each have a rotating "open week" where they are not assigned cases and are able to catch up on investigations and paperwork. ${ }^{202}$

[^42]Section XI of the consent decree, "Handling of Reports of Sexual Assaults" mandates requirements for training detectives, investigating cases, and tracking case results. These requirements will improve the professionalism of Sex Offense Unit case investigations in the long term, but may increase amount of time it takes an investigator to conduct an investigation.

Detectives and supervisors use an investigative checklist currently located in Lotus Notes case management system. The checklist provides a guide, containing 33 investigative tasks, to track case activity that must be completed for each case. Supervisors are directed to review and approve case activity based on the checklist by 48 hours, and then $7,14,28$, and 60 days after the case is opened. The Unit aims to close each case within 30 days. The State's Attorney's Office is responsible for reviewing cases for charging, which may extend the amount of time a case is open. ${ }^{203}$

The BPD has averaged a 54 percent clearance rate for sexual assault cases compared to the 2016 Uniform Crime Report average of 38.4 percent for jurisdictions across the U.S. from 500,000 to 999,999 in population. ${ }^{204}$

## Child Abuse Unit

The Child Abuse Unit handles cases of physical and sexual child abuse. The unit is headed by a lieutenant and should have two squads, each lead by a sergeant. As of April 30, 2018, Squad A had a sergeant and six detectives, with the sergeant and one of the detectives on limited duty, and Squad B had no sergeant and four detectives. ${ }^{205}$

In 2017, the Child Abuse Unit handled 455 cases. ${ }^{206}$ Unit personnel cover day and evening shifts with an on-call system used after 3 pm . The unit handles physical and sexual child abuse cases. It works out of the Baltimore Child Abuse Center (a non-profit organization) located in the City of Baltimore. The unit is co-located with civilian forensic interviewers, child forensic assault physicians and State's Attorney representatives. ${ }^{207}$

Child Abuse cases are assigned similarly to those in the Sex Offense Unit, using an "oldest case" rotation based on which detectives are working at the time case comes in. Detectives have reportedly averaged 54 cases per year in the past, although the caseload declined some in 2017 when 455 cases were reported for an average of 46 cases per detective. Case assignments are made approximately every five to seven days. The unit uses the same checklist and supervisory review process as the Sex Offense unit. Detectives must complete a report within 10 days per state law and forward it to Child Protective Services. The Unit's goal is to get the case to State's

[^43]Attorney's Office (SAO) within 30 days. Review by the SAO of child abuse cases takes longer then sex offense case reviews due to their complexity and involvement of juvenile victims. ${ }^{208}$

### 6.4 Citywide Robbery and District Detectives

Prior to July 2018, the Citywide Robbery and District Detective Section handled robbery and burglary cases throughout the city. The section was led by a major and was organized into units that fall under either robbery or burglary.

As of April 30, 2018, Citywide Robbery employed 36 detectives, including one listed as suspended. The detectives were split among eight squads in addition to one detective assigned to administrative duties and two assigned to an FBI Task Force. Each of the eight main squads should be led by a sergeant, and a lieutenant should oversee four squads each, although in April one sergeant position remained empty and one lieutenant was on limited duty. ${ }^{209}$ Citywide Robbery is centralized, although generally each squad is assigned a district station coverage area and each detective is assigned a sector in their district of responsibility. ${ }^{210}$ In 2017, Citywide Robbery handled 5,469 robbery cases. ${ }^{21}$

Besides robbery, as of April 30, 2018, the section also employed 38 detectives, including five employees on limited duty and one listed as suspended, organized into nine district-based squads and one administrative unit. Each district burglary squad was led by a sergeant and typically had four detectives assigned. A lieutenant was additionally assigned to the administrative unit. ${ }^{212}$ The burglary squads were decentralized. Since burglary detectives were based in the districts they focus on, the squads work directly with their district commanders ${ }^{213}$ and may be assigned aggravated assault cases as well. ${ }^{214}$ In 2017, District Burglary Detectives handled 6,965 burglary cases. ${ }^{215}$

In July 2018, the burglary squads were dissolved, with officers being reassigned to patrol. ${ }^{216}$

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### 6.5 Investigations Workload Analysis

### 6.5.1 Homicide Caseload Analysis Using Best Practice Ratios

One approach recommended to be used specifically for an analysis of homicide staffing is an analysis of caseload per detective. While no widely accepted 'caseload per homicide detective,' standard exists, the Bureau of Justice Assistance report Homicide Process Mapping: Best Practices for Increasing Homicide Clearances recommends a best practices ratio of approximately 3 cases per year per lead investigator.

As the report states:
"While a range of different models exists, an optimum squad size appears to be one supervisor and four investigators, with investigators rotating as the lead investigator. The number of squads is at an optimum when, given the annual number of homicides in a jurisdiction, each investigator is the lead investigator for three homicides per year. At first impression, this number may seem low; however, there are several factors that lead to this practice. The lead investigator typically has a number of responsibilities on a case that other investigators do not have. These include managing the information flow and the case file, briefing supervisors and commanders on the status of cases, meeting with the District Attorney's Office on the investigation, meeting with the medical examiner, and meeting with forensic analysts, as well as a wide array of other case management responsibilities. Significant time is spent with witnesses and family management that is sometimes overlooked by police management. In addition, the lead investigator will be responding to homicide scenes and providing investigative support to other cases. Finally, in virtually all homicide units studied, investigators are also assigned to other cases-such as officer-involved shootings, suicides, suspicious deaths, and/or kidnappings. These would be additional cases that often are not as detailed and consuming as homicide investigations. Hence, while the optimum number of cases for which an investigator may serve as lead may be three cases a year, there are many other responsibilities in the investigator's portfolio." 217

This recommendation was qualified with "Obviously, this number is a guidepost and not absolute, because it will depend on the nature of the cases." ${ }^{218}$

After reviewing BPD cases and investigative processes, a Police Executive Research Forum (PERF) study of BPD's Homicide Investigation process similarly recommended that based on this

[^45]best practice and the nature of BPD cases, BPD should staff their homicide unit so that each detective rotates as the lead on an average of four to six new homicide cases a year. ${ }^{219}$

While only one major factor in homicide clearances, as noted by the BJA report, BPD data suggests that when cases per detective is lower, closure rates tend to improve. Table 18 compares the homicide closure rates in Baltimore to the cases per detective and provides the UCR closure rate for comparison. In 2015 and 2016, as the number of homicide detectives declined at the same time that homicides rose to over 300 in the year, the number of average cases per detective rose to over eight and homicide closure rates dropped.

Table 18: BPD Homicides, Homicide Detectives, and Closures

| Year | BPD <br> Homicide- <br> Specific <br> Cases ${ }^{220}$ | BPD Average <br> Number of Homicide <br> Detectives (Squads A <br> and B Only) | BPD Average <br> Number of Homicide <br> Cases per Detective | BPD <br> Homicide <br> Closure Rate | UCR Homicide <br> Closure Rates for <br> cities/counties <br> $\mathbf{5 0 0 , 0 0 0 - 9 9 9 , 9 9 9 ~}$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 2012 | 217 | 47 | 4.6 | $48.4 \%$ | $50.9 \%$ |
| 2013 | 235 | 48 | 4.9 | $50.2 \%$ | $57.2 \%$ |
| 2014 | 211 | 45 | 4.7 | $45.0 \%$ | $56.2 \%$ |
| 2015 | 344 | 40 | 8.6 | $28.2 \%$ | $50.2 \%$ |
| 2016 | 314 | 37 | 8.5 | $37.3 \%$ | $49.3 \%$ |
| 2017 | 343 | 45 | 7.6 | $51.6 \%$ | Unavailable |

Sources: "2012-October 2017 Detective Caseload," BPD Homicide Unit; "Homicide Analysis 2017 End of Year Report," BPD Homicide Unit; Percent of Offenses Cleared by Arrest or Exceptional Means, 2012-2016, Uniform Crime Report.

Based on this information, the PF team recommends that BPD remain the 3 cases assigned annually per homicide detective ratio. Should BPD move to return their cases per detective ratio to 3 , in line with the standard set by academic research, the following table displays the approximate number of detectives they would need varying by 250,300 and 350 cases per year.

Table 19: BPD Homicide Detective Recommendations for Caseload Ratios

| Homicide Cases | Homicide <br> Detectives Recommended for a '3 Cases per Detective' Ratio | Homicide <br> Detectives Recommended for a '4 Cases per Detective' Ratio | Homicide <br> Detectives Recommended for a '5 Cases per Detective' Ratio |
| :---: | :---: | :---: | :---: |
| 250 | 83 | 63 | 50 |

[^46]| 300 | 100 | 75 | 60 |
| ---: | ---: | ---: | ---: |
| 350 | 117 | 88 | 70 |

### 6.5.2 Investigative Unit Caseload Analysis Using Solvability and Time Estimates

A common approach to examining investigative unit staffing relies on using solvability factors to categorize and estimate the time required to fully investigate cases depending on the availability of solvability factors. No matter how much police officers and investigators put forth in investigative effort, not all crimes can be solved. Solvability factors are the pieces of information at a crime scene that may help to bring a case to a successful disposition. The factors help to assess the likelihood that a more extended investigation will produce results. ${ }^{221}$

Useful solvability factors include:

- Witnesses to the crime - individuals or "electronic witnesses" in the form of video/audio recordings;
- Knowledge of suspect's name;
- Knowledge of where the suspect may be located;
- Description of the suspect;
- Description of the suspect's vehicle;
- Traceable property;
- Specific method of operation (MO);
- Presence of usable physical evidence; and
- Assistance of the public and/or the news media. ${ }^{222}$

Using solvability factors, cases can be divided into four general categories ("contact only", "less complex", "typical", and "more complex"), representing their degree of available solvability factors and thus how different cases vary in the length of time they may take to be solved or otherwise concluded:

- "Contact only" cases have very little solvability and are low on investigative priority. They usually merit a recontact of the victim to see if any further evidence has turned up.
- "Less complex" cases typically have a great many solvability factors and are relatively easy to solve. For example, a less complex case may involve readily available DNA evidence and a perpetrator known to the victim.
- "Typical" cases have a moderate number of solvability factors. With a concentrated investigative focus, they can often be solved.
- "More complex" cases may have few solvability factors but with a maximum of investigative effort may be solved. This effort may include finding witnesses and getting them to testify.

[^47]The BPD does not use a formal solvability system. Its case assignment process depends on the current caseload, the type and complexity of a case, and the general impression of the case's solvability. In addition, none of the BPD investigative units examined were able to provide time estimates for the amount of time needed to complete a case, or otherwise records data that would allow for a thorough analysis using BPD case time.

As discussed earlier, in place of this data, time estimates for the average time needed to complete a case were reviewed from past studies of investigative staffing as a proxy to complete this workload analysis. However, these proxies were deemed insufficient for producing an accurate analysis due to variations in investigative protocols, requirements and processes across agencies. For example, certain BPD SIS units, like the Family Crimes Unit described being backlogged on internal reporting because of the amount of time it takes to manually enter data into their information systems. ${ }^{223}$ While anecdotal information can inform estimates used, without BPD-specific accurate data, an investigative analysis cannot necessarily account for longer (or shorter) time requirements a BPD detective may have to enter data given their specific data entry requirements and existing information management systems, compared to other departments. It similarly cannot account for other variations of time between BPD-specific time usage and time estimates derived from other departments.

BPD should establish procedures to document related information, specific-to their investigations, to be able to conduct more analyses specific to their investigative priorities and hours spent in the future. Once the BPD has this data, they will be able to use the calculations outlined in the table below to make closer approximations about necessary staffing.

The sample analysis table below provides a better view of the calculations necessary to determine necessary investigative staffing.

Table 20: Sample Investigations Unit Calculations

| Investigative Unit | Average <br> Time per <br> Case <br> Weighted by | Total Number of Cases in $2017^{225}$ | Total <br> Estimated <br> Hours <br> Needed to <br> Investigate <br> Cases in a <br> Year using | BPD Average <br> Rate (\%) of <br> Time for <br> Detectives to Conduct | BPD <br> Annual <br> Hours per <br> Detective <br> per Year ${ }^{228}$ | Detectives Needed ${ }^{229}$ | Current <br> Detectives <br> 230 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

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|  | Solvability Factors ${ }^{224}$ |  | BPD \# of Cases ${ }^{226}$ | Investigations 227 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Homicide |  | 483 |  | 81.02\% | 1685.22 | 57 |
| Shootings |  | 703 |  | 82.07\% | 1707.06 | 26 |
| Arson |  | 169 |  | 61.54\% | 1280.03 | 4 |
| Economic Crimes |  | 105 |  | 80.77\% | $1680.02$ | 2 |
| Family Crimes |  | 9518 |  | 71.71\% | $1491.57$ | 8 |
| Missing Persons |  | 484 |  | 78.97\% | 1642.58 | 5 |
| Sex Offenses |  | 322 |  | 79.90\% | 1661.92 | 13 |
| Child Abuse |  | 455 |  | 76.50\% | 1591.20 | 10 |
| Robbery |  | 5469 |  | 82.12\% | 1708.10 | 36 |
| Burglary |  | 6965 |  | 77.23\% | 1606.38 | 38 |

Sources: BPD responses to Police Foundation Staffing Study Materials Request List, sent from Compliance, Accountability \& External Affairs Division to PF team, January 9, 2018; 2017 SIS case load received via email from Major, SIS, May 24, 2018; "CID Staffing Charts," April 30, 2018; BPD payroll leave data, January 1, 2017-December 31, 2017; and lists of detectives and their rank who were assigned to each unit in January 2017 and December 2017.

### 6.6 Investigations Recommendations

Recommendation 15: The BPD should conduct business process mapping and investigative staffing reviews to ensure processes and staffing strategies are in line with national best practices for the most efficient and effective investigations to increase clearance rates and improve customer service.

- For example, research on homicide investigation best practice may include:
o Braga, Anthony \& Desiree Dusseault. "Can Police Improve Homicide Clearance Rates." Harvard Kennedy School, Rappaport Institute. November 2017. https://www.hks.harvard.edu/sites/default/files/centers/rappaport/files/braga homicidecl earance\%20v7.pdf
o Carter, D. and Jeremy Carter. "Effective Police Homicide Investigations: Evidence from Seven Cities with High Clearance Rates." 2015. Volume: 20 issue: 2, page(s): 150-176

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o Carter, D. "Homicide Process Mapping: Best Practices for Increasing Clearances." 2013. https://www.iir.com/Documents/Homicide Process Mapping September email.pdf.
o US Department of Justice, Bureau of Justice Assistance. "An Assessment of the New Orleans Police Department Homicide Section." 2010. https://centerforimprovinginvestigations.org/wp-content/uploads/2017/07/NOPD-Homicide-Assessment-March-2011.pdf

Recommendation 16: BPD should adopt a case assignment system that uses solvability factor processes. This will allow for more efficient and effective allocation of cases and investigative tasks.

Recommendation 17: BPD should work with the Information Technology Section to ensure that new case management technology is able to support collecting data at a micro-level including case time completion by solvability factor, so that workload can be managed at the detective level and staffing decisions can be properly informed. BPD's analysis should also consider prosecutorial and community priorities and preferences. BPD should establish procedures to document related information, specific to their investigations, to be able to conduct more analyses that are more specific to their investigative priorities and hours spent in the future.

Recommendation 18: BPD Investigations staff should work in partnership with district patrol to enhance its relationship with the community to improve chances of receiving quality investigative information.

## 7 Analysis of Office of Professional Responsibility Staffing

The BPD Office of Professional Responsibility (OPR) is in charge of investigating allegations of misconduct involving BPD personnel. Such investigations include equal opportunity and diversity complaints, misconduct allegations, body-worn camera violations, pursuits, officer involved vehicle accidents, and policy compliance.

Along with BPD's reorganization, OPR has undergone several changes over the last year. In the May 15, 2018 organizational chart, OPR resided under the Strategic Investigations and Support Services Bureau. ${ }^{231}$ A chief headed the Office. A major oversaw the Policy Compliance Section, Internal Affairs Section, and a second Internal Affairs Section with responsibilities for bodyworn camera violations and pursuits, and Administrative Section. A director oversaw the Equal Opportunity and Diversity Section (EODS). ${ }^{232}$

[^50]As of August 7, 2018, OPR became a direct report to the police commissioner. The Office also had plans to return officer-involved vehicle accident reviews to the traffic section with an Internal Affairs Division (IAD) detective component. As of August 7, 2018, OPR staffing is as follows: ${ }^{233}$

- One chief
- Anti-Corruption/Ethics Section:
o One lieutenant colonel
o One sergeant
o Three detectives
- Internal Affairs
o One major (administrative unit, intake classification, integrity assurance and investigations)
o Six lieutenants (full duty)
o Six sergeants (full duty)
o One sergeant (light duty)
o One sergeant (medical)
o 27 detectives (full duty)
o Three detectives (408)
o Three contract specialists
o One community service officer
o One lieutenant (EODS)

As OPR does not currently track the time required to complete each case investigation, a comprehensive staffing analysis based on workload and case time estimates cannot be completed. However, examinations of OPR's workload and comparisons to other departments can provide a better understanding of OPR staffing and suggestions for future staffing.

### 7.1 Internal Affairs Staffing and Workload

Internal Affairs (IA) is responsible for investigating complaints against officers. As of August 8, 2018, IA was broken into three investigative sections that handle cases citywide, rather than being sectioned into areas. Each section consists of one lieutenant, two sergeants and seven detectives (full duty) and one detective (408). Currently, four detective vacancies exist in each section totaling 12 detectives. Table 21 presents IA's caseload in 2016 and 2017. ${ }^{234}$

Table 21: Internal Affairs Cases in 2016 and 2017

| Case Type | 2016 | 2017 |
| :---: | :--- | :--- |

[^51]| Total Received Cases - Internal, External, <br> Ethics, and Administratively Tracked <br> Incidents | $\mathbf{6 7 3}$ | $\mathbf{7 4 2}$ |
| :--- | :--- | :--- |
| Sustained Internal, External, and Ethics Cases | 167 | 203 |
| Closed Internal, External, and Ethics Cases | 901 | 482 |
| Closed Administratively Tracked Incidents | 86 | 116 |
| Police Officer Involved Shootings | 13 | 10 |
| Accidental Discharges | 3 | 4 |
| Animal Shootings | 5 | 3 |
| Excessive Force (Includes Unwarranted Action <br> and Unnecessary Force) | 124 | 71 |
| Abusive or Discriminatory Language | 116 | 44 |
| False Arrest or False Imprisonment | 93 | 112 |
| Harassment | 84 | 79 |
| Use of Force Reports | 1,423 | 2,203 |

Source: "PC Weekly Report 12-31-2017," BPD Office of Professional Responsibility.
BPD OPR's target for completion of a full internal investigation is 90 days, but the PF team was told that investigations can often take as long as nine months. ${ }^{235}$ Internal affairs investigations must be extremely thorough to achieve credibility. Investigators assigned to perform internal investigations must also be well trained and have the ability to ensure investigations are fair for both complainants and officers.

The consent decree sets additional specific requirements for "Misconduct Investigations and Discipline," including a requirement that BPD "Complete their administrative investigations within 90 days of the initiation of the investigation. Any request for an extension of time must be approved in writing by the Director of the OPR." 236

OPR personnel reported that administrative duties take an extraordinarily long time due to their case system. IA uses both electronic files and hardcopy files, often with neither system entirely complete. As a result, personnel may spend more time than otherwise necessary tracking down information they already have. The BPD Technology Resource Study submitted to the Court in June of 2018 also identified deficiencies in the use of IAPro to streamline IA case investigations.

OPR was subject to details; thus, detectives may be detailed out even when already overwhelmed with cases. ${ }^{237}$ In recent months, this practice has been discontinued so that detectives only spend working hours on their assigned cases. ${ }^{238}$ In addition to developing a more trusted and comprehensive case management system, BPD should consider increasing

[^52]their civilian staffing. Table 22 details the numbers of internal affairs staff members for comparable departments.

Table 22: Comparable Internal Affairs Staff

|  | Baltimore <br> Police <br> Department <br> $(\mathbf{2 0 1 8})^{239}$ | New Orleans <br> Police <br> Department <br> $(\mathbf{2 0 1 8 )}$ | Austin Police <br> Department <br> $(\mathbf{2 0 1 2})^{\mathbf{2 4 0}}$ | Cleveland <br> Police <br> Department <br> $(2018)$ | Newark Police <br> Department <br> (2018) |
| :---: | :--- | :--- | :--- | :--- | :--- |
| Actual Department Staffing <br> $(2016)^{241}$ | 2,908 | 1,403 | 2,361 | 1,678 | 1,383 |
| Internal Affairs <br> Section/Division/Unit | $24(52$ in OPR <br> total) | 40 | 12 | 8 | $15(21$ in OPR <br> Total) |
| Sworn | 22 | 27 | 12 | 15 |  |
| Sworn Percentage of <br> IA Total | $91.7 \%$ | $67.5 \%$ | $100 \%$ | $87.5 \%$ | $100 \%$ |
| Detectives | 15 | 4 | 0 | 0 | 3 |
| Sergeants | 5 | 17 | 11 | 7 | 8 |
| Civilian | 2 | 13 | 0 | 1 | 0 |
| Civilian Percentage of <br> IA Total | $8.3 \%$ | $32.5 \%$ | $0 \%$ | $12.5 \%$ | $0 \%$ |

Sources: Emails from staff members provided to assessment team, from New Orleans Police Department, May 4, 2018, Cleveland Division of Police, May 4, 2018, and Newark Police Division, May 11, 2018; Austin Police Department Patrol Utilization Study.

### 7.2 Policy Compliance Section Staffing and Workload

The Policy Compliance Section was responsible for reviewing policy compliance cases as well as failure to appear cases and supervisor requests. As of May 9, 2018, the Policy Compliance Section was led by a lieutenant and had four squads of one sergeant and two to three detectives each. Table 23 displays the 2016-2017 cases.

Table 23: Policy Compliance Section Cases in 2016 and 2017

| Case Type | $\mathbf{2 0 1 6}$ | $\mathbf{2 0 1 7}$ |
| :--- | :--- | :--- |
| Policy Compliance Cases | 1,908 | 2,335 |
| Failure to Appear Cases | 503 | 176 |
| Supervisor Requests | 1,675 | 1,266 |

Source: "PC Weekly Report 12-31-2017," BPD Office of Professional Responsibility.

BPD is currently in the process of updating their policy regarding these violations. Once updated, BPD plans that minor violations like failure to appear or being late for duty will return

[^53]to the districts for commanders to handle. As the plan proceeds, OPR will continue to monitor the system and its progression. ${ }^{242}$

### 7.3 Equal Opportunity and Diversity Section Staffing and Workload

The function of BPD's Equal Opportunity and Diversity Section (EODS) is to investigate complaints about equal opportunity and diversity issues from both inside and outside BPD. According to a memo from then-Chief of the Office of Professional Responsibility (OPR) dated September 26, 2017, EODS is to record complainant interviews and then forward those that appear to be policy violations to Internal Affairs for a misconduct investigation. Complaints that do not rise to this level are recorded and placed in a case file. Cases that, after Internal Affairs investigation, do not substantiate a violation are returned to EODS for the creation of a position statement that describes the department's defense that goes to the appropriate agency: the federal Equal Employment Opportunity Commission, Maryland's Human relations Commission or the City of Baltimore's Office of Civil Rights.

As of May 1, 2018, EODS was staffed by one director, one lieutenant and one officer on 408 status. ${ }^{243}$ Until the July 2016 reorganization, in addition to the current staffing, EODS also had a sergeant, five detectives, a contract specialist and an administrative position assigned to the unit. In 2016, EODS processed 57 complaints of internal discrimination one of which met the standard for a probable cause finding of discrimination. In 2017, 74 internal complaints were processed with one meeting the probable cause standard. ${ }^{244}$

Under the current process, requests for disability accommodation are handled by Human Resources and most investigations are conducted by Internal Affairs. As of August 8, 2018, BPD plans to move EODS to Human Resources (HR) under the HR director and the current EODS director will handle all external complaints. OPR will host the EODS lieutenant for the purpose of cases that require disciplinary correction. ${ }^{245}$

In 2017, EODS conducted 36 internal trainings, including three for the Academy, two for cadets, two for new supervisors, 27 for supervisors, one for the command staff, and one for an individual. ${ }^{246}$ Beyond this, EODS has limited ability to conduct internal training on equality opportunity and diversity issues or conduct mediation sessions. ${ }^{247}$

[^54]
### 7.4 Impact of Consent Decree Requirements on OPR

Increased accountability through improvement in the process to investigate citizen complaints, and OPR protocols will impact BPD staffing in this section going forward. Consent decree paragraphs 329-415 lay out requirements for BPD misconduct investigations and discipline. ${ }^{248}$ Working with the Monitoring Team, BPD has begun to implement changes in this area, implementing significant organizational changes in the last few months. In December 2018, BPD will submit the revised OPR Investigation Policies and Manual to the Court. By January 2019, BPD will have a draft 40-hour training for OPR investigators that addresses consent decree requirements related to OPR training. ${ }^{249}$

### 7.5 Office of Professional Responsibility Recommendations

Recommendation 19: BPD OPR personnel should continue to work with the Information Technology Section to develop information management systems that streamline case management as well as collects appropriate data for tracking and analyzing staffing and accountability. OPR personnel reported that administrative duties can take an extraordinarily long time due to their case system. IA uses both electronic files and hardcopy files, often with neither system entirely complete. Contract specialists now perform all the hard copy file pulling. OPR expects to be assigned a cadet to assist with digital automation of files. ${ }^{250}$

- BPD OPR should collect detailed information on staff time spent investigating cases. This data will help to set benchmarks from which to make more informed staffing determinations and for purposes accountability.

Recommendation 20: BPD should use evidence-based processes and data to evaluate OPR staffing needs on a regular basis, particularly in light of changes made under the consent decree reforms. According to the BPD EODS internal staffing memo, "Based on the information provided, and the needs of a large agency to be both reactive and proactive in specialized equal opportunity and diversity issues, the department should staff the EODS with the Director, a lieutenant, one detective (replacing the 408 officer) and two civilian EEO investigators."

## 8 Analysis of Baltimore Education and Training Section (Academy, InService, Firearms) Staffing

### 8.1 Current Education and Training Section Functions

[^55]The Education and Training Section ( E and T ), including the Police Academy, is a critical component of the BPD. As of May 15, 2018, the BPD E and T was moved under the responsibility of the Office of Constitutional and Impartial Policing, which reports directly to the interim police commissioner.

Among other responsibilities, BPD E and T:

- provides entry level training for recruits, currently 38 weeks of classroom instruction, physical training, and scenario-based exercises;
- oversees the field training evaluation program for recruits following classroom training, currently 10 weeks of training with multiple Field Training Officers (FTOs); ; ${ }^{251}$
- trains FTOs, currently a two-week program for new FTOs;
- conducts in-service training for all existing officers including firearms qualification, annually consisting of about one to two weeks; ${ }^{252}$ and
- provides leadership training for newly promoted sergeants and lieutenants.

The BPD E and T is required to meet all requirements as outlined by the Maryland Police and Correctional Training Commission (MPCTC). In addition, the consent decree requires a number of changes to officer training provided at BPD, which will impact staffing needs.

### 8.2 Current Police Academy Staffing

As of January 19, 2018, the E and T was budgeted for 81 positions; however, the actual strength of the Section was 71 , including 59 sworn and 12 civilian staff members. ${ }^{253}$ Five of these filled positions were also labeled as light duty or out on medical, suspended, or a detail. The positions are responsible for training and oversight functions, as well as primarily administrative responsibilities like record keeping.
$E$ and $T$ was organized into:

- three entry-level training units,
- academic and field training unit,
- legal unit,
- continuing education unit,
- medical training unit,
- community engagement unit,
- emergency vehicle operator course (EVOC) unit,
- administrative unit,
- compliance unit (which was vacant),

[^56]- professional development,
- law department,
- records unit, and
- range and armory units.


### 8.3 Police Academy Workload

Currently, BPD's entry level training academy can host four recruit classes a year. Classes can run simultaneously with one recruit class in field training, and others in the academy with staggered start dates, so they are in different phases of training at any one time. ${ }^{254}$ The maximum class size has typically been capped at about 60 recruits, largely because of limited classroom space at BPD's existing training facilities. ${ }^{255}$ This allows entry level training for about 240 officers per year, which is lower than BPD's goal of hiring 60 new officers every 10 weeks. ${ }^{256}$

From 2008 through the first three classes of 2017, classes had an average enrollment rate of approximately 45 trainees and an average graduation rate of approximately 37 trainees. During this period, the Police Academy graduated the highest number of trainees in 2012 with 220 graduates over five classes. The Police Academy had the fewest number of graduating trainees in 2015, the same year as the riots following Freddie Gray's death, with 94 graduates over three classes. Enrollment has increased since then. ${ }^{257}$

Table 24 displays the number of enrolled and graduated trainees from 2008 through part of 2017.

Table 24: Enrolled and Graduated Trainees, 2008-2017

| Year | Enrolled | Graduated |
| :--- | :--- | :--- |
| 2008 | 263 | 207 |
| 2009 | 244 | 198 |
| 2010 | 179 | 144 |
| 2011 | 197 | 172 |
| 2012 | 277 | 220 |
| 2013 | 157 | 129 |
| 2014 | 196 | 162 |

[^57]| 2015 | 121 | 94 |
| :--- | :--- | :--- |
| 2016 | 118 | 105 |
| 2017 (first <br> three classes) | 150 | 129 |

Source: Memo on Trainee Stats 2008-Present, from Sergeant, Academic Records/Scheduling Supervisor, to Director, Police Training Academy, November 13, 2017. Provided to PF team, November 13, 2017.

No national standard exists for the staffing levels of police academies. Depending on the course, lower instructor to student ratios have been considered an important consideration as too large a ratio may result in some trainees slipping through the cracks due to inability of staff to pay close attention to the progress of all recruits in a class. Lack of available instructors can also hold up the training process; in one example, the physical agility test for entry level personnel has reportedly taken longer than necessary, causing delays in other training sessions, as a result of limited staffing. ${ }^{258}$

As a survey of other police departments conducted by BPD in 2015 found, average instructor-to-student ratios for tactical training including defensive tactics and high risk car stops tend to be low for other large police agencies: 1-to-5 at the Dallas Police Department, 1-to-3 at the St. Louis Police Department, and approximately 1-to-3 for scenarios and test days at the Boston Police Department. ${ }^{259}$ In California, the instructor-to-student ratio depends on the course, but overall 1 sergeant and 6 full time staff positions are maintained for two academies of 50 people each. ${ }^{260}$ Washington State uses similar ratios of full time staff and uses many civilian instructors.

Table 25 details the numbers of training staff members for comparable departments.

Table 25: Comparable Training Staff

|  | Baltimore Police <br> Department | New Orleans <br> Police <br> Department | Cleveland <br> Police <br> Department | Newark Police <br> Department <br> (limited current <br> training) |
| :---: | :--- | :--- | :--- | :--- |
| Actual Department Staffing (2016) ${ }^{261}$ | 2,908 | 1,403 | 1,678 | 1,383 |
| Training Academy/Division/Section | 71 | 27 | 21 | 13 |
| Sworn | 59 | 20 | 21 | 12 |
| Sworn Percentage of Training <br> Total | $83.1 \%$ | $74.1 \%$ | $100 \%$ | $92.3 \%$ |
| Officers/Detectives | 40 | 12 | 15 | 6 |

[^58]| Civilian | 12 | 7 | 0 | 1 |
| :--- | :--- | :--- | :--- | :--- |
| Civilian Percentage of Training <br> Total | $16.9 \%$ | $25.9 \%$ | $0 \%$ | $7.7 \%$ |

Sources: Emails from staff members provided to PF team, from New Orleans Police Department, May 4, 2018, Cleveland Division of Police, May 4, 2018, and Newark Police Division, May 11, 2018.

### 8.4 Additional Considerations for Police Academy Staffing

BPD's efforts toward reform including consent decree requirements as well as unique characteristics of BPD operations bring additional considerations for BPD Police Academy staffing, as noted below.

Increased Entry Level Training Length. In 2018, entry level training has been increased from approximately 35 weeks to 38 weeks to accommodate increased emphasis on training areas highlighted by the consent decree.

Special Event Details. The training requirements of BPD require virtually constant academy operations. Any lost training time due to lack of Academy staff negatively effects the whole of BPD operations both in the long and short term. Staff are cross-trained so that unexpected absences do not result in lost training time; however, as Police Academy leaders have noted, there is "no room for unforeseen incidents," and the Police Academy is "constantly pulling staff from one job to another to 'make it work'." ${ }^{262}$

An internal memo from 2017 estimates vacation and other personnel leave allows approximately 12 percent of a squad to be out at any given time. ${ }^{263}$ On top of regular time out, sworn academy personnel are regularly requested to staff special event details. The need to continue operations with decreased staff places a substantial burden on Police Academy personnel.

Table 26 displays a snapshot of Police Academy special event details from 2015 and 2016.

Table 26: Police Academy Special Event Details, 2015-2016

|  | 2015 |  | 2016 |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Month | Details | Officers |  | Details |  |

[^59]| May | 8 | 27 | 5 | 30 |
| :--- | ---: | ---: | ---: | ---: |
| Jun | 12 | 17 | 5 | 31 |
| Jul | 2 | 8 | 6 | 25 |
| Aug | 1 | 1 | 3 | 30 |
| Sep | 4 | 6 | 8 | 44 |
| Oct | 3 | 18 | 6 | 33 |
| Nov | 4 | 8 | 5 | 44 |
| Dec | 9 | 22 | 3 | 29 |
| Total | 62 | 169 | 60 | 382 |

Note: Each officer per detail was counted once, although the same officer may have been pulled for more than one detail the same month. Each detail was counted as one day, despite some details spanning more than one day.
Source: Baltimore Police Department. "2015 - 2016 Detail List." (n.d.). Provided to PF team November 1, 2017.

Data Entry. The Police Academy has a records unit that tracks records for in-service, recruit, and other training. Since 2014, the unit has struggled to maintain records and comply with State mandated reporting requirements because of technical issues with the Police Academy's existing records management systems. Records system issues, including a critical error that caused many entry level training records to be lost, have strained staffing for the unit as records have had to be re-entered manually from hard copies on file. Similarly, records system issues have been exacerbated by both internal and external staffing challenges. In one example, after an MPCTC officer retired in 2017, his knowledge of a process to convert BPD's training record files to MPCTC's importable format for compliance was lost. BPD and MPCTC are continuing to attempt to address this issue. ${ }^{264}$ Data entry into the Police Academy's records management systems and continued maintenance of hard copy records is time consuming and since it is completed by sworn personnel, diverts work time away from other tasks that may require sworn management personnel. This staffing allocation places non-sworn duties unnecessarily on sworn personnel, diverting them away from sector patrol functions that are so critically low.

Incorporation of Scenario-based Training. Contemporary police training has come to require greater staff commitment as police departments move to integrate more adult learning principles throughout the curriculum. Rather than a single instructor lecturing to a large class with the expectation that students take notes and then take written tests to show content mastery, simulations and scenarios are now a critical element in police training, both recruit and in-service. The Police Academy is increasingly working to integrate scenario-based training as part of both entry level and in-service training.

Yet, scenario-based training requires staff to act as role players in many of these scenarios. One challenge is to find ways to avoid excessive trainee downtime as the student waits his/her turn to move through the scenario. Many scenario exercises require a one instructor to five students

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ratio as well as the presence of a supervisor and a safety officer. These requirements will add a need for more Continuing Education staff to ensure accountability and safety.

Additional Continuing Education Requirements. The Police Academy also provides training for the entire department in areas required by the consent decree such as Constitutional Policing and De-Escalation, which has increased the responsibility of the Academy to expand its training offerings in addition to continuing to meet State requirements as outlined by the Maryland Police and Correctional Training Commissions (MPCTC).

Recruitment \& Hiring. It is clear at this point in this study, that in order to meet the requirements of the consent decree and provide improved service to the people of Baltimore, increased recruitment and hiring goals must be established. These efforts will result in a need to train new hires in order to alleviate sector patrol shortages.

According to internal Police Academy memos and reports, staff believe that the Police Academy is short staffed. ${ }^{265}$ Creating an exceptional training environment for new hires and existing officers requires sufficient staff to keep abreast of new mandates and training methodologies, to conduct an increasing number of scenarios in accordance with the principles of adult learning, to adapt to the requirements of the consent decree and to maintain a constant focus on safety and accountability. As a comparison, the New Orleans Police Department increased their Academy staff from 13 to 23 and adjusted their number of adjunct instructors to comply with training requirements in their consent decree. ${ }^{266}$

The department and the city will need to make a substantial commitment both in terms of longrange planning and funding to enable the academy to fulfill its mission. Various analyses by academy personnel show a keen awareness of the resources needed to create an outstanding training environment. Consideration should be given to implementing the recommendations made in these reports.

### 8.5 Education and Training Staffing Recommendations ${ }^{267}$

## Recommendation 21: Vacant Education and Training positions should be filled to the $\mathbf{8 1}$

 budgeted positions. Efforts should be made to maintain budgeted staffing levels. This will require the assignment of two additional lieutenants, three additional sergeants and six[^61]additional police officers. In addition, the vacant civilian office assistant position should be filled. Expanding academy staff will increase the pool of role players for scenarios, provide breaks for instructors that now are in almost constant teaching mode and maintain a professional atmosphere that should contribute to successfully meeting the myriad training needs of the BPD.

Recommendation 22: To the extent possible, academy staff should be exempt from details. This will free up E and T staff focus on increased training demands due to increased hiring and training needs as well as those required under the consent decree.

Recommendation 23: BPD should study PTA business processes to identify ways to increase efficiencies and divert work to civilian positions. An existing internal PTA study recommends adding a total of 18 civilian positions. The memo also recommends the department should add civilian instructors and other contract specialists to the academy. These are new positions that expand the staffing of the academy and are not designed to replace sworn staffing. This will enable academy staff to attend professional development courses to improve their expertise and will provide allow more personnel for scenarios and simulations. A staff of mixed sworn and civilian personnel can integrate the street experience that comes from sworn staff plus the technical skills that come from civilians with applicable backgrounds. Some civilian positions may be filled by retired officers.

Recommended positions include:

- One civilian instructor to the EVOC unit
- One civilian to Community Engagement
- One civilian instructor to Continuing Education
- One civilian instructor to Medical/CBRN Unit
- One civilian to the Compliance Unit
- Two data entry clerks to the Records Unit
- One civilian instructor to each of the four entry level units
- Two law professors to the Law Department
- One civilian contract specialist to Range Administration
- One civilian instructor to each of the four range squads.

Recommendation 24: BPD PTA should identify and implement creative ways to incorporate civilians and community members into scenario-based training, particularly those strategies that may reduce BPD staffing requirements. This can create opportunities for increased community engagement and understanding between community members and police officers.

Recommendation 25: BPD Education and Training Section should work with the information technology section to identify and implement technology that will improve section efficiency and reduce reliance on personnel for departmental training requirements.

Recommendation 26: An additional Entry Level Training Unit should be added to the academy to increase the number of concurrent classes from four to five-four in the academy and one in field training. The Academy staff has stated they have the physical space capacity to add another class. An additional Entry Level Unit should be composed of a sergeant, three police officers, one law instructor and one civilian instructor. The law instructor and the civilian instructor are accounted for in the civilian positions above. The sergeant and three officers would be new positions.

## 9 Baltimore Police Information Technology Section (ITS) Analysis

Although not historically prioritized as a core function at BPD, data management is tied to many of the efforts at improving BPD work process efficiencies.

Since 2017 and 2018 alone, the structure of BPD IT changed several times. As part of the changes, many IT staff members who had previously worked as contractors were incorporated as City employees. Currently, the BPD Information Technology Section (ITS), which supports the information technology, policing data collection and storage functions of the BPD, resides within the Homeland Security Division of the BPD. Staff are centrally located at BPD Headquarters.

Baltimore is also currently in the process of moving to consolidate IT across the city. However, the plan has not yet been finalized. Baltimore City Office of Information \& Technology (BCIT) staff are working closely with BPD ITS to support this process. It is unclear to the PF staff how this will impact staffing for the BPD IT function.

Much of the ITS staffing information below has been derived from the BPD Technology Resource Study submitted to the Court in June 2018.

### 9.1 ITS Staffing

Below is a list the positions within ITS, current as of March 28, 2017. ITS employs 34 staff (some of whom are contractors and some of whom are part time) and supports hundreds of functions within BPD.

Table 27: BPD ITS Positions and Responsibilities

| Position | Vendor Name /City <br> Employee | RACI - Application/Systems <br> Responsibility |
| :--- | :--- | :--- |
| DIRECTOR | City Employee | IT Director for BPD |
| LT. | Sworn | Deputy IT Director |


| P/O | Sworn | Wiring, wagon inspections, and general PC support |
| :---: | :---: | :---: |
| P/O | Sworn | Wiring, wagon inspections, and general PC support |
| P/O | Sworn | Mobile Device Configuration (phones and tablets) |
| OAIII | City Employee | General Admin and Timekeeping |
| NETWORK/PC SUPPORT STAFF | ComTech/TCS | Help Desk (Tier 1 \& 2) |
| NETWORK/PC SUPPORT STAFF | ComTech/TCS | Help Desk ( $\operatorname{ier} 1$ \& 2) |
| NETWORK/PC SUPPORT STAFF | ComTech/TCS | Help Desk (Tier 1 \& 2) - Evenings |
| NETWORK/PC SUPPORT STAFF | TriGyn | Help Desk (Tier 1 \& 2) |
| NETWORK/PC SUPPORT STAFF | TriGyn | Help Desk (Tier 1 \& 2) |
| ANAL PROG II | City Employee | Application Development and Support <br> - RMS, Crystal reports |
| ANAL PROG II | City Employee | Application Development and Support |
| COMM ANALYST II | City Employee | Desk phones, mobile phones, and mobile tablets maintenance |
| COMPUTER OPERATOR | City Employee | 1st Shift |
| COMPUTER OPERATOR | City Employee | 3rd Shift |
| COMPUTER OPERATOR | City Employee | 2nd Shift |
| DEVELOPER | ComTech/TCS | SharePoint Developer |
| DEVELOPER | TriGyn | Application Development and Support (PL/SQL) |
| LAN ADMINISTRATOR | ComTech/TCS | NCIC administrator |
| Network Engineer | TriGyn | Network Engineer |
| Network Engineer | TriGyn | Network Engineer |
| SYSTEM ADMIN | TriGyn | System Administration (Novell), MDM |
| SYSTEM ADMIN | TriGyn | System Administration (Novell), MDM |
| ORACLE DBA | TriGyn | Oracle DBA |
| PROJECT MANAGER | TriGyn | LPR, Gunshot detection (ShotSpotter), CCTV, Carfax Investigations, RMS, Vidsys, 360 Cameras |
| PROJECT MANAGER | ComTech/TCS | Voice Over IP, Strategic Decision Support Center (SDSC), SOP's, Verizon cell numbers, Network Upgrade |
| PROJECT MANAGER | ComTech/TCS | SAN upgrade, Crime Lab, OrganizationWide Software List, Procurement Database/SharePoint, UPS Maintenance, IAPro |
| PROJECT MANAGER | City Employee | Timekeeping, BPD website, Mobile Data Computers, eResource Planner |
| WEB DEVELOPER | TriGyn | Drupal Web Developer |
| SUBJECT MATTER | Self | Lotus Notes Developer |


|  |  | Application Development and support <br> GIIS) |
| :--- | :--- | :--- |
| SUBJECT MATTER EXPERT | ComTech/TCS | Mainframe Application Development <br> and Support |
| COMPUTER REPAIR | City Employee | ComTech/TCS | Hardware repair.

Source: Baltimore Police Department, Information Technology Section.

### 9.2 ITS Workload

In June 2018, BPD submitted a Technology Resource study outlining the current state of technology and data management at BPD. The report outlined a number of deficiencies and corresponding recommended changes for improving BPD's data management. Some of the issues outlined in the Technology Resource study are described here:

ITS lacks executive leadership. ITS is currently led by a BPD Director. This is a civilian position that is not a member of the BPD Executive staff. This lack of rank has created a void in ITS's ability to compete for scarce resources and to align priorities with those created by the top level of the department. Without a central authority positioned to advocate for sound IT decision making throughout the department, BPD has historically reacted to opportunities that are perceived to help individual units by unit commanders, rather than examining opportunities from a department or city-wide perspective.

ITS lacks an overarching IT strategy and comprehensive plan for the future of data management. Without beginning with an overarching IT strategy, to include the structure and staffing of the section, technology projects have historically been partially rolled out, and then due to various reasons, stopped and scrapped.

IT training is virtually non-existent. This is in large part due to lack of available staff time. As an example, for newly deployed mobile data computers, IT provided 'train the trainer' training to representatives in each district. This was intended to be taken back to train the rest of the officers in their districts on MDC functionality. However, that process translated into those representatives handing officers a printed-out PowerPoint presentation to review on their own as training. Similarly, IAPro has been rolled out in various areas of the department, including the Office of Professional Responsibility, the Use of Force Assessment Unit, and the Early Intervention Unit, but it has been inefficiently used in part because of a lack of training on available functionality.

BPD lacks a process for communicating IT information to BPD personnel and has no way to gather input into IT needs from BPD staff. While a 'help desk' type service does exist, it does not track user input or needs into systems. ${ }^{268}$
${ }^{268}$ Baltimore Police Department Technology Resource Study.
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### 9.3 Impact of the Consent Decree on ITS Staffing

In December 2018, the BPD Monitor will submit a completed technology resource plan to the Court, fulfilling requirements under Paragraph 269 of the consent decree. ${ }^{269}$ This document will lay out a resource plan for BPD to adopt the technology necessary to satisfy other requirements of the consent decree. The technology adopted will both affect and be affected by staffing in the department. ITS must be sufficiently staffed to ensure that as new technologies are incorporated into business processes, they have the IT support and training to be used to their full potential. As technologies are adopted, they may also lessen the burden on staff time for certain time-consuming business processes through increased data automation and validation.

### 9.4 ITS Staffing Recommendations ${ }^{270}$

Recommendation 27: Create a chief information officer (CIO) or chief data officer (CDO) position of sufficient rank and authority. It is important that this position hold significant rank (executive level) within BPD to centralize IT decision making, advocate for IT resources and ensure IT decisions align with the priorities of the department. The CIO / CDO should ensure detailed documentation exists for each system and database to include the reason the system/database was implemented and the business requirements it does and does not address, as well what is needed to maintain the system. Documentation would provide BPD with a process for more informed IT-related expenditure decisions. The CIO / CDO should be able to guide and support BPD's move away from using silo systems that have created disparate information toward systems and processes that better support business process functions throughout the department. More efficient systems and processes could potentially reduce staff time required to perform duties.

Recommendation 28: In collaboration with BCIT, ensure that BPD's ITS is sufficiently staffed to be able to meet the requirements of the technology resource plan. As the technology resource plan is implemented, BPD must be able to support the roll out of new technologies, development of existing technologies, training for users, and be available for other support as issues arise. It is still undetermined how the Baltimore City Information Technology (BCIT) will support and provide resources for BPD ITS.

Recommendation 29: Establish and appropriately staff single authorities for managing IT requests for services, data table maintenance, and user data needs and requests. These authorities should be staffed appropriately. Establishing a central authority positioned to advocate for the IT needs of the entire department would enable the department to pursue ITrelated projects more efficiently.

[^62]
## 10 Baltimore Police Crime Laboratory Analysis

### 10.1 Crime Laboratory Staffing

BPD's crime laboratory is part of the BPD organization and is responsible for processing, controlling, and analyzing criminal evidence. The traditional crime laboratory falls under the Science and Management Services Division, which also includes Human Resources, the Medical Section, the Property Section, and the Body Worn Camera Unit.

The crime laboratory is comprised of the Laboratory Section and the Crime Scene Sciences and Evidence Control Section, each led by a director. As of June 13, 2018, the crime laboratory was composed of 129 civilian staff members in addition to the 15 sworn personnel assigned to the Evidence Control Unit (ECU). ${ }^{271}$ Additionally, the crime laboratory had 18 vacant civilian positions in the Laboratory Section and Crime Scene Unit and 21 vacant sworn personnel in the ECU. ${ }^{272}$

### 10.2 Crime Laboratory Methodology

In 2018, the Science and Management Services Division conducted internal staffing analyses of the Laboratory Section, Crime Scene Unit, and Evidence Control Unit. This crime laboratory section is comprised of information from these assessments. In addition, the PF team used the 2015-2016 Project FORESIGHT report to compare staffing levels in the Laboratory Section and Crime Scene Unit against benchmark data. The Project FORESIGHT report consolidated data from 139 crime laboratories to create benchmark data on cases per year per full time employee (FTE). ${ }^{273}$ As noted by a 2016 staffing study of the Kansas City, Missouri Police Department, Project FORESIGHT has become the "defacto comparison tool for forensic labs to benchmark." ${ }^{274}$ Project FORESIGHT data provides one indication of the level of productivity within the average laboratory by investigative area.

The PF team did not independently verify the information presented from the Science and Management Services Division's internal assessments provided to the team in August 2018. However, the information presented here can inform BPD as it seeks to develop plans to staff its crime laboratory to sufficiently manage case volume.

[^63]
### 10.3 Crime Laboratory Workload Analysis

## Laboratory Section

The Laboratory Section is responsible for the analysis and testing of evidence in support of ongoing investigations and prosecution. The Section is comprised of the following units:

- Director's Office
o Quality Office
o Administrative Unit
- Comparative Sciences
o Latent Print Unit
o Firearms Analysis Unit
- Analytical Sciences
o DNA Unit
o Forensic Screening/Serology Unit
o CODIS Unit
o Trace/Questioned Documents Unit
o Drug Analysis Unit

With current staffing, BPD is unable to keep up with its current case workload, even before considering their existing backlogs. This has reportedly had a negative impact on the Laboratory Section's ability to deliver timely information and has forced a focus primarily on violent crimes to the exclusion of other crime types. ${ }^{275}$

To assess caseloads for different laboratory units, the PF team used benchmark data from the 2015-2016 Project FORESIGHT report. ${ }^{276}$ Table 28 shows the staffing levels that the BPD units would need to handle their annual caseload at the Project FORESIGHT-identified $75^{\text {th }}$ percentile cases-per-FTE ratio in each unit area. Weighted toward laboratories with higher crime volumes, the $75^{\text {th }}$ percentile ratio was used to provide a caseload benchmark. Caseload information used is based on the Science and Management Services Division's internal staffing analysis. While not considered in the estimation, the end of year case backlog is additionally displayed for context.

Table 28: Laboratory Section Workload Analysis

|  |  |  |  | FORESIGHT | Needed FTEs to |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | Cases | Backlog at | BPD's Estimated | Number of Cases | Percentile | Handle Annual |
| Caseload at | Current |  |  |  |  |  |
| Submitted | the End of | the Unit is | Cases-per- | FORESIGHT 75 ${ }^{\text {th }}$ | Number |  |
| Unit | in 2017 | 2017 | Currently Able to | FTE Ratio | Percentile Ratio | of FTEs |

[^64]|  |  |  | Complete per <br> Year $^{277}$ |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Latent <br> Print Unit | 5,196 | 10,000 | 2,500 | 214 | 24 | 8 |
| Firearms <br> Unit | 4,991 | 2,001 | 3,848 | 140 | 36 | 13 |
| DNA <br> Analysis <br> Unit | 1,029 | 644 | 708 | 126 | 8 | 7 |
| Forensic <br> Screening <br> /Serology <br> Unit | 1,768 | 88 | 1,068 | 132 | 13 | 19 |
| Drug <br> Analysis <br> Unit | 12,454 | 22,980 | 6,399 | 528 | 24 |  |

Note: Case numbers are based on January 1-December 31, 2017 totals.
Sources: "Staffing Analysis Labs," Science and Management Services Division, provided to PF team August 1, 2018; Science and Management Services Division Organizational Chart, June 13, 2018; Project FORESIGHT Annual Report, 2015-2016.

## Crime Scene Unit

Part of the Crime Scene Sciences and Evidence Control Section, the Crime Scene Unit (CSU) is primarily responsible for the documentation, collection, processing, and preservation of evidence found at crimes scenes. The CSU's crime laboratory technicians (CLTs) respond to a wide range of incidents, including but not limited to homicides, shootings, questionable deaths, aggravated assaults, sex offenses, robberies, car jackings, and burglaries. CLTs also administer Breath Alcohol tests; oversee training for new CLTs; ensure that all CLTs receive 40 hours of training annually for accreditation maintenance; and evaluate new methods, procedures, and technology for compliance with current trends and best practices.

As of June 13, 2018, the CSU had 42 members including 16 CLT Ils and 21 CLT Is. The CSU is organized into 4 squads-A, B, C, and D-each of which is led by a CLT supervisor.

The Science and Management Services Division's internal staffing analysis reports that the CSU responded to 16,134 calls for service in 2017. ${ }^{278}$ According to the 2015-2016 Project FORESIGHT report, the $75^{\text {th }}$ percentile of their benchmark data was 146 cases-per-FTE in crime scene investigation annually. ${ }^{279}$ To keep up with this case volume at this $75^{\text {th }}$ percentile amount, the CSU would need 111 FTEs, or 69 additional FTE positions.

[^65]Table 29: Crime Scene Unit Workload Analysis
$\left.\begin{array}{|l|l|l|l|l|l|}\hline \begin{array}{l}\text { Calls for } \\ \text { Service } \\ \text { Volume } \\ \text { (2017 Total) }\end{array} & \begin{array}{l}\text { Current } \\ \text { Number } \\ \text { of FTEs }\end{array} & \begin{array}{l}\text { Current } \\ \text { Number of } \\ \text { Cases per FTE }\end{array} & \begin{array}{l}\text { FORESIGHT 75 } \\ \text { th } \\ \text { Percentile Cases- } \\ \text { per-FTE Ratio }\end{array} & \begin{array}{l}\text { Needed FTEs to } \\ \text { Handle Annual } \\ \text { Caseload at } \\ \text { FORESIGHT 75 }\end{array} & \begin{array}{l}\text { th }\end{array} \\ \hline 16,134 & 42 & 384.1429 & 146 & \begin{array}{l}\text { Current and } \\ \text { Needed FTEs with } \\ \text { FORESIGHT 75 }\end{array} \\ \text { Percentile Ratio }\end{array}\right\}$

Sources: "Staffing Analysis CSI," Science and Management Services Division; Project FORESIGHT Annual Report, 2015-2016.

## Evidence Control Unit

Within the Crime Scene Sciences and Evidence Control Section, the Evidence Control Unit (ECU) serves as BPD's sole repository for all items taken into custody by members of the department. ECU personnel ensure that submitted items are documented properly; ensure that storage of items is consistent with legal standards; and ensure that items no longer needed are disposed of. As of June 13, 2018, the ECU was staffed with thirteen civilians, including one on medical, and fifteen sworn members, including three officers noted as on limited duty and one suspended. In addition to these filled positions, the unit had eighteen officer and three sergeant vacancies. ${ }^{280}$

The ECU does not currently have any staff solely responsible for disposing of property and evidence no longer needed. Disposing items could involve returning stolen items to their rightful owner or completing the destruction of dangerous/sensitive items in a timely manner. The resulting buildup of items has placed additional strain on the unit to maintain, inventory, and store thousands of items.

The Science and Management Services Division's internal staffing analysis of the ECU found that according to the International Association for Property \& Evidence Inc. (IAPE), a properly functioning property and evidence unit should be disposing of approximately 90 percent of submitted items every year. ${ }^{281}$ As Table 30 displays, based on this disposal rate and BPD's estimated average number of items and time required, BPD would need 8 full time staff members dedicated to properly disposing evidence to keep up with items received annually. This estimate does not consider the buildup of items in storage over decades that have not been disposed of.

[^66]Table 30: Property and Evidence Disposal Workload Analysis

| Property and <br> Evidence Items Received in 2017 | Estimated <br> Number of Items that Should be Disposed (Approximately 90\%) | Average <br> Number of Items per Case Number | Average <br> Time <br> Required to <br> Purge <br> Evidence for <br> 1 Case <br> (Hours) | Average <br> Work Hours <br> a Staff <br> Person is Available for Duties ${ }^{282}$ | Personnel <br> Required to <br> Maintain <br> Disposal <br> Rate | Current <br> Allocated <br> Staff |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 94,496 | 85,046 | 3 | 0.5 | 1,715 | 8 | 0 |

Source: "Staffing Analysis ECU," Science and Management Services Division, provided to assessment team August 1, 2018.

In addition to disposals, the internal staffing analysis of the ECU notes the importance of maintaining supervisory positions at the receiving counter; general property and warehouse; and money, drug, and firearms vaults. ${ }^{283}$ Furthermore, as the internal analysis notes, the ECU does not have an existing vetting process for personnel working in this capacity. ${ }^{284}$ For technicians that may be required to testify to chain of evidence, this seems a critical oversight.

Currently, the ECU has vacant sergeant positions in the general property and warehouse, and drug and money vaults, in addition to other vacant officer positions. Supervisors can help to foresee and prevent potential issues, and ensure completed work is accurate. Likewise, instituting comprehensive background checks before assignment to the property unit would be consistent with best practices. BPD's internal staffing analysis found that one IAPE standard specifically recommends that, "Personnel should undergo a thorough background check prior to assignment to a position inside the property unit," even if they have undergone a preemployment background check. ${ }^{285}$

### 10.4 Crime Laboratory Recommendations

Recommendation 30: BPD should invest in additional staff positions to handle annual caseloads and case backlogs in the laboratory. Enabling the forensic laboratory to manage their caseload can help to lower and eventually eliminate long delays in the delivery of important investigative lead information.

- BPD should increase their number of CLTs to better support the CSU's function. Increasing CLT staff would lower the call volume per employee to improve time to the scene, quality of analyses, and support the mental and physical well-being of staff.
- BPD should establish a disposition element within the ECU with full time personnel assigned with the sole responsibility of properly disposing of unnecessary items in a

[^67]timely manner. Assigning personnel to support disposals would help BPD to dispose items that are no longer needed in an appropriate and timely manner as well as lower the existing buildup of items in storage.

- BPD should continue to civilianize the ECU and prioritize filling all vacant supervisory positions. Civilianizing positions or creating new civilian positions within the ECU may help to alleviate sworn staffing requirements, including filling the vacant supervisory positions.

Recommendation 31: BPD should explore innovative and cost-effective strategies to handle annual caseloads and case backlogs in the laboratory.

- BPD should identify ways to reduce crime laboratory response to calls for service and corresponding analysis. This could be done by employing cutting edge technology or moving the response requirement out of the BPD crime laboratory for certain tasks such as conducting breath alcohol testing.

Recommendation 32: BPD should institute comprehensive background checks before assignment to the property unit to be consistent with national crime laboratory best practices.

## 11 Staffing Special Details \& Events

Special events are important for cities, bringing community members together and attracting tourists into the city. Ensuring sufficient staffing for the security of special events, while maintaining staffing and resource levels for regular patrol operations is critical. ${ }^{286}$ In 2017, BPD planned for 34 major events that required increased staffing. ${ }^{287}$ Like other departments, needing to meet staffing goals for these events and regular operations can be challenging, and it is particularly challenging for a department that is already short staffed for regular patrol operations.

Being pulled to staff a special detail or event is a common occurrence throughout BPD for sworn personnel. Sworn personnel are pulled for details from throughout the department including patrol, investigative units, and the training academy. When BPD is unable to meet its previously established target minimum staffing, the department uses voluntary and forced overtime to cover staffing. ${ }^{288}$ On top of this, because of limited civilianization, the PF team heard that administrative functions often go unfilled when sworn staff with those responsibilities are pulled for special details and events, creating backlogs of work. As the

[^68]Civilianization section discusses, civilianization enables sworn officers to concentrate on fewer functions, such as being on the street or in field services. ${ }^{289}$

The Baltimore City Department of Transportation's Special Events Permitting and Street Vending Licenses section issues permits related to events held in Baltimore City. These major events may include festivals, block parties, demonstrations, races, walk-a-thons, concerts, and parades. ${ }^{290}$ Like other departments, BPD works with special event organizers to determine security for the event and depending on the type of event charges a fee of $\$ 45 /$ hour per officer working security and $\$ 50$ per marked police vehicle for mobile events.

The City of Seattle, Washington, charges a fee of $\$ 67 /$ hour per Seattle police officer with a twohour minimum per officer to work events categorized as athletic events, commercial events, or citywide events. ${ }^{291}$ The Washington DC Metropolitan Police Department has a special event user fee of $\$ 69.43$ per officer per hour. ${ }^{292}$ The City of Alexandria, Virginia, has a fee of $\$ 60$ per police staff person. ${ }^{293}$ City special event fee systems and associated rates can help cities to recover costs of staffing special events. ${ }^{294}$

Similarly, many police departments partner with other departments to staff events. ${ }^{295}$ BPD regularly receives support from other agencies like the Baltimore City Department of Transportation, and Baltimore City School Police to staff major events, although these numbers are variable and may be unknown to BPD until close to the time of the event. ${ }^{296}$ Outside agencies like the Maryland Transport Authority and Maryland State Police have also supported initiatives like a January "blitz" that increased the number of officers on the street for a limited period of time for crime prevention. With outside support, the initiative reportedly had a smaller staffing impact on regular patrol operations for the districts. ${ }^{297}$

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### 11.1 Staffing Special Detail Recommendations

Recommendation 33: BPD leaders should work with ITS and BCIT to ensure they maintain awareness of officer assignments and other resources. As with day-to-day operations, special events highlight the importance of having an accurate database to track officer assignments, shifts, and timecards to allow departmental leaders to maintain situational awareness of their deployed officers and resources, and to adjust as necessary. ${ }^{298}$

Recommendation 34: BPD should establish processes and protocols that preclude the need to pull police officers out of district patrol to staff events and other planned details. This may include creating a 'special events unit' or 'details unit' that staffs all special events and details. Additionally, BPD should work to identify ways to off-set the cost of such staffing.

## 12 Civilianization



Many cities hire civilians with specialized professional skills to fill critical roles within the police department. A 2014 report by the U.S. Department of Justice, Office of Community Oriented Policing Services reported that civilians now account for approximately a third of law enforcement department staffing nationwide. 299

Employing civilian staff can:


- improve police departments' internal professional skill sets;
- provide opportunities for flexible staffing options;
- change the culture of the department by including non-sworn community perspective into the ranks;
- improve cost effectiveness of operations;
- improve efficiency proficiency of completing some tasks; and
- reduce staffing costs.

The report continues to explain that, "currently, U.S. police agencies use civilians for each of the following task areas:

- Providers of clerical, accounting, reception, dispatch, maintenance, custodial, detention, and technical duties;
- Uniformed first responders to nonviolent calls for service;
- Crime scene processors and forensic crime lab employees;
- Crime victim service providers in the field;
- Analysts, researchers, and planners;
- Community liaisons and public information officers; and

[^70]- Command staff and strategic leaders." ${ }^{300}$

As part of a broad strategy to improve the BPD's professionalism, efficiency and connection with their community, the BPD should continue to consider civilianization of staff positions. In a 2017 civilianization plan built by the BPD chief financial officer, recommendations for civilianization of 297 positions within the BPD were made. ${ }^{301}$ The plan estimated a cost savings of approximately $\$ 6.5$ million if all recommended positions transitioned. Since that time, the department has changed leadership three times, and has been reorganized several times. While some of the civilian positions have been created and filled, many of these civilianization recommendations have not been implemented.

Figure 20: Comparisons of Civilian Positions as a Percentage of Total Actual Department Staffing

## Comparisons of Civilian Positions as a Percentage of Total Actual Department Staffing



Figure 20 displays BPD's civilian positions as a percentage of the department's total actual staffing compared to other comparison departments. It should be noted that BPD's percentage of civilian staff members includes units like the BPD crime laboratory which is staffed almost entirely by civilians. According to a June 13, 2018 organizational chart of the Science and Management Services Division, crime lab staff account for 129 civilian positions. ${ }^{302}$ If BPD's number of total civilian staff for 2017 (430) is reduced by 129, it brings the total civilian staff to

[^71]301, bringing BPD's percentage of civilian staff down to 10.2 percent—an extremely low civilianization ratio for a police department in 2018.

### 12.1 Civilianization Recommendations

Recommendation 35: BPD should make focused efforts to increase civilianization within the department.

- The department should work to quickly identify positions currently filled by sworn personnel that could be filled by civilians. The department should use the civilianization study conducted by the BPD CFO in 2017 to begin the process. Those positions should be transitioned and sworn personnel should be moved to fill sector patrol positions.
- Working with the City of Baltimore, BPD Human Resources should evaluate and document the business processes and the skillsets of personnel in each Unit of the department within BPD. As part of a broader effort to improve efficiencies within the department, BPD should make serious efforts to evaluate business processes and all positions throughout the department currently filled with sworn officers to determine if those positions could be filled by civilian personnel. This will increase the number of civilian opportunities and free up sworn staff to return to sector patrol. Each Unit should create documented roles and responsibilities for each position.
- Based on these revised roles and responsibilities, BPD should refresh the department civilianization plan and work to fill professional civilian positions within the department. This strategy will professionalize non-sworn positions resulting in better service and a cost savings.
- BPD should place sworn officers in positions that require sworn skillsets.


## 13 Appendix

### 13.1 List of Recommendations

### 13.1.1 Patrol Staffing Recommendations (Chapter 5.5)

Recommendation 1: The City of Baltimore should ensure that budgeted police officer positions for sector patrol are not frozen and are available for BPD to fill up to the budgeted level. The stopping and starting of providing available funding to hire new BPD police officers can inhibit the flow of viable candidates from entering the BPD recruitment and hiring process. This has ramifications for the hiring process that can continue for years.

Recommendation 2: BPD should work to prioritize the patrol function and reduce the vacancy rate in district patrol as soon as possible. In the short term this means identifying ways to put police officers into the districts to cover shifts as opposed to pulling them out for details, administrative, or other assignments. Additionally, smoothing police officer vacancies across the organization will increase the number officers assigned to patrol functions and reduce the need for overtime and drafting. In the long term, they should work to fill budgeted patrol positions as soon as possible at least up to the recommended level of 910 , but preferably up to the full budgeted level through increased efforts to recruit and hire qualified police officers.

Recommendation 3: BPD should review and revise all departmental policies pertaining to patrol staffing.

- BPD should ensure that staffing related terms are clearly and consistently defined in policies. Specifically, in Policy 819, 'Department Patrol Staffing Shortages,' should clearly and specifically define patrol officer, patrol shortages, minimum levels of service, etc. Other definitions to be defined should include authorized, frozen, budgeted and funded positions.
- The department should also clearly document its process for development of minimum staffing 'constants.' This information is necessary to ensure that it is understood across the department and allows for the measurement of impact of reduced service delivery. All definitions, policies, procedures and practices in studying staffing should be documented and placed in a shared location for transparency of staffing decisions.
- BPD should develop, define and codify minimum patrol daily staffing number. They should re-allocate officers into patrol to meet this daily staffing number as soon as possible and ensure policy exists to keep these officers working patrol. This number should ensure officers can respond to calls for service and allow time for other community policing, problem solving and self-initiated tasks.

Recommendation 4: BPD should define and maintain clear policies and processes to track and document the exact assignment and location of staff. While conducting this workload analysis, the PF team needed to supplement payroll / personnel data with shift strength reports, staffing rosters and other reports to piece together assignments and locations of police
officers assigned to sector patrol. This information should be maintained in one data system for ease of analysis.

- BPD should complete a review of all police officer positions and duties in sector patrol to determine how many police officers are actually working patrol functions (responding to calls for service and other proactive policing) on a daily basis vs. performing other functions.

Recommendation 5: BPD should conduct an audit of call-taking and dispatch processes to ensure that communications staff and officers are adhering to policies and procedures, and that those policies and procedures meet national standards and contribute to transparent data collection. As part of this process, the BPD should conduct focus groups with representative groups of BPD officers and communications staff to assist in identifying ways to improve call-taking and dispatch service.

- BPD should conduct a full review of call-taking and dispatch priorities, policies, and protocols. This should include reviewing and updating the more than 600 call type codes currently used, call priorities, and requirements for officers to report status. As an example, silent alarm calls are received frequently and are coded as a priority 1 calls. However, some in the department report that since these are typically false alarms, officers may not respond as they would to a priority 1 call.

Recommendation 6: BPD should identify business processes and staffing strategies that can reduce the use of sworn officers performing administrative duties as soon as possible. This should include business process mapping throughout the department and a comprehensive civilianization study.

Recommendation 7: BPD should develop strategies to reduce call volume for police officers assigned to sector patrol, both online and telephonic reporting as soon as possible. This may include the increased use of 311 and other city service lines or the use of civilian staff to take on duties that do not require a police officer.

Recommendation 8: BPD should re-engineer response strategies to improve efficiency in response to calls for service as soon as possible. This may include reviewing and re-prioritizing calls for service, using differential response units, establishing city laws that assess fees for frequent users of 911 , such as, businesses and other reoccurring calls, and identify ways to streamline processes like the 'no calls.' While none of this will eliminate the need for more officers but might decrease time demand.

Recommendation 9: BPD should collect consistent, validated data necessary for completing thorough and comprehensive staffing studies on a regular basis. Policies and technology should be put into place to ensure that validated, consistent data is collected and kept in a way that it can be accessed and analyzing without manipulation.

Recommendation 10: BPD should analyze variations in districts' response times to determine causes for slower or faster response times within and across districts. This analysis should
include exploring the many variables that can impact response time to include district geography, logistics, traffic patterns, crime rates and types, etc.

- Using this information, the BPD should complete an evaluation of district / post boundaries to ensure that the boundaries create the most efficiencies in providing policing services to the city of Baltimore.

Recommendation 11: BPD should study and revise patrol deployment and shift strategies in light of community policing requirements under the consent decree. Strategies should support community partnerships and problem solving.

Recommendation 12: BPD should use best practices to maximize and regularly measure and assess officer discretionary time.

Recommendation 13: Response to calls for service time should be examined during weekly Comstat to identify challenges and ensure accountability for response in each of the districts. Goals for response times should be defined, informed by community survey and police officer input, by the Police Commissioner.

Recommendation 14: BPD should continue workload analysis and deployment / allocation studies on an annual basis using national best practices, while reform efforts are on-going, to ensure that staffing levels continue to address community needs. These studies should continue on a regular basis thereafter approximately every three to five years.

- A cadre of BPD staffing subject matter experts should be tasked with conducting regular, evidence-based analysis of BPD staffing.
- The process used should not only include a workload analysis, but also community input, police officer input, consideration of department priorities, and other relevant information to inform a comprehensive study.
- BPD should consider establishing a 'Research and Planning,' or similar unit that is staffed with academic and research staff who are able to support evidence-based studies throughout the organization and assist in planning efforts. This unit should regularly partner with local universities to leverage academic skillsets and resources to develop data-supported strategies to solve problems and study issues in the organization.


### 13.1.2 Investigations Recommendations (Chapter 6.6)

Recommendation 15: The BPD should conduct business process mapping and investigative staffing reviews to ensure processes and staffing strategies are in line with national best practices for the most efficient and effective investigations to increase clearance rates and improve customer service.

- For example, research on homicide investigation best practice may include:
o Braga, Anthony \& Desiree Dusseault. "Can Police Improve Homicide Clearance Rates." Harvard Kennedy School, Rappaport Institute. November 2017. https://www.hks.harvard.edu/sites/default/files/centers/rappaport/files/braga homicidecl earance\%20v7.pdf
o Carter, D. and Jeremy Carter. "Effective Police Homicide Investigations: Evidence from Seven Cities with High Clearance Rates." 2015. Volume: 20 issue: 2, page(s): 150-176
0 Carter, D. "Homicide Process Mapping: Best Practices for Increasing Clearances." 2013. https://www.iir.com/Documents/Homicide Process Mapping September email.pdf.
o US Department of Justice, Bureau of Justice Assistance. "An Assessment of the New Orleans Police Department Homicide Section." 2010. https://centerforimprovinginvestigations.org/wp-content/uploads/2017/07/NOPD-Homicide-Assessment-March-2011.pdf

Recommendation 16: BPD should adopt a case assignment system that uses solvability factor processes. This will allow for more efficient and effective allocation of cases and investigative tasks.

Recommendation 17: BPD should work with the Information Technology Section to ensure that new case management technology is able to support collecting data at a micro-level including case time completion by solvability factor, so that workload can be managed at the detective level and staffing decisions can be properly informed. BPD's analysis should also consider prosecutorial and community priorities and preferences. BPD should establish procedures to document related information, specific to their investigations, to be able to conduct more analyses that are more specific to their investigative priorities and hours spent in the future.

Recommendation 18: BPD Investigations staff should work in partnership with district patrol to enhance its relationship with the community to improve chances of receiving quality investigative information.

### 13.1.3 Office of Professional Responsibility Recommendations (Chapter 7.5)

Recommendation 19: BPD OPR personnel should continue to work with the Information Technology Section to develop information management systems that streamline case management as well as collects appropriate data for tracking and analyzing staffing and accountability. OPR personnel reported that administrative duties can take an extraordinarily long time due to their case system. IA uses both electronic files and hardcopy files, often with neither system entirely complete. Contract specialists now perform all the hard copy file pulling. OPR expects to be assigned a cadet to assist with digital automation of files. ${ }^{303}$

- BPD OPR should collect detailed information on staff time spent investigating cases. This data will help to set benchmarks from which to make more informed staffing determinations and for purposes accountability.

Recommendation 20: BPD should use evidence-based processes and data to evaluate OPR staffing needs on a regular basis, particularly in light of changes made under the consent decree reforms. According to the BPD EODS internal staffing memo, "Based on the information

[^72]provided, and the needs of a large agency to be both reactive and proactive in specialized equal opportunity and diversity issues, the department should staff the EODS with the Director, a lieutenant, one detective (replacing the 408 officer) and two civilian EEO investigators."

### 13.1.4 Education and Training Staffing Recommendations (Chapter 8.5)

Recommendation 21: Vacant Education and Training positions should be filled to the $\mathbf{8 1}$ budgeted positions. Efforts should be made to maintain budgeted staffing levels. This will require the assignment of two additional lieutenants, three additional sergeants and six additional police officers. In addition, the vacant civilian office assistant position should be filled. Expanding academy staff will increase the pool of role players for scenarios, provide breaks for instructors that now are in almost constant teaching mode and maintain a professional atmosphere that should contribute to successfully meeting the myriad training needs of the BPD.

Recommendation 22: To the extent possible, academy staff should be exempt from details. This will free up E and T staff focus on increased training demands due to increased hiring and training needs as well as those required under the consent decree.

Recommendation 23: BPD should study PTA business processes to identify ways to increase efficiencies and divert work to civilian positions. An existing internal PTA study recommends adding a total of 18 civilian positions. The memo also recommends the department should add civilian instructors and other contract specialists to the academy. These are new positions that expand the staffing of the academy and are not designed to replace sworn staffing. This will enable academy staff to attend professional development courses to improve their expertise and will provide allow more personnel for scenarios and simulations. A staff of mixed sworn and civilian personnel can integrate the street experience that comes from sworn staff plus the technical skills that come from civilians with applicable backgrounds. Some civilian positions may be filled by retired officers.

Recommended positions include:

- One civilian instructor to the EVOC unit
- One civilian to Community Engagement
- One civilian instructor to Continuing Education
- One civilian instructor to Medical/CBRN Unit
- One civilian to the Compliance Unit
- Two data entry clerks to the Records Unit
- One civilian instructor to each of the four entry level units
- Two law professors to the Law Department
- One civilian contract specialist to Range Administration
- One civilian instructor to each of the four range squads.

Recommendation 24: BPD PTA should identify and implement creative ways to incorporate civilians and community members into scenario-based training, particularly those strategies
that may reduce BPD staffing requirements. This can create opportunities for increased community engagement and understanding between community members and police officers.

Recommendation 25: BPD Education and Training Section should work with the information technology section to identify and implement technology that will improve section efficiency and reduce reliance on personnel for departmental training requirements.

Recommendation 26: An additional Entry Level Training Unit should be added to the academy to increase the number of concurrent classes from four to five-four in the academy and one in field training. The Academy staff has stated they have the physical space capacity to add another class. An additional Entry Level Unit should be composed of a sergeant, three police officers, one law instructor and one civilian instructor. The law instructor and the civilian instructor are accounted for in the civilian positions above. The sergeant and three officers would be new positions.

### 13.1.5 Information Technology Section Staffing Recommendations (Chapter 9.4)

Recommendation 27: Create a chief information officer (CIO) or chief data officer (CDO) position of sufficient rank and authority. It is important that this position hold significant rank (executive level) within BPD to centralize IT decision making, advocate for IT resources and ensure IT decisions align with the priorities of the department. The CIO / CDO should ensure detailed documentation exists for each system and database to include the reason the system/database was implemented and the business requirements it does and does not address, as well what is needed to maintain the system. Documentation would provide BPD with a process for more informed IT-related expenditure decisions. The CIO / CDO should be able to guide and support BPD's move away from using silo systems that have created disparate information toward systems and processes that better support business process functions throughout the department. More efficient systems and processes could potentially reduce staff time required to perform duties.

Recommendation 28: In collaboration with BCIT, ensure that BPD's ITS is sufficiently staffed to be able to meet the requirements of the technology resource plan. As the technology resource plan is implemented, BPD must be able to support the roll out of new technologies, development of existing technologies, training for users, and be available for other support as issues arise. It is still undetermined how the Baltimore City Information Technology (BCIT) will support and provide resources for BPD ITS.

Recommendation 29: Establish and appropriately staff single authorities for managing IT requests for services, data table maintenance, and user data needs and requests. These authorities should be staffed appropriately. Establishing a central authority positioned to advocate for the IT needs of the entire department would enable the department to pursue ITrelated projects more efficiently.

### 13.1.6 Crime Laboratory Recommendations (Chapter 10.4)

Recommendation 30: BPD should invest in additional staff positions to handle annual caseloads and case backlogs in the laboratory. Enabling the forensic laboratory to manage their caseload can help to lower and eventually eliminate long delays in the delivery of important investigative lead information.

- BPD should increase their number of CLTs to better support the CSU's function. Increasing CLT staff would lower the call volume per employee to improve time to the scene, quality of analyses, and support the mental and physical well-being of staff.
- BPD should establish a disposition element within the ECU with full time personnel assigned with the sole responsibility of properly disposing of unnecessary items in a timely manner. Assigning personnel to support disposals would help BPD to dispose items that are no longer needed in an appropriate and timely manner as well as lower the existing buildup of items in storage.
- BPD should continue to civilianize the ECU and prioritize filling all vacant supervisory positions. Civilianizing positions or creating new civilian positions within the ECU may help to alleviate sworn staffing requirements, including filling the vacant supervisory positions.

Recommendation 31: BPD should explore innovative and cost-effective strategies to handle annual caseloads and case backlogs in the laboratory.

- BPD should identify ways to reduce crime laboratory response to calls for service and corresponding analysis. This could be done by employing cutting edge technology or moving the response requirement out of the BPD crime laboratory for certain tasks such as conducting breath alcohol testing.

Recommendation 32: BPD should institute comprehensive background checks before assignment to the property unit to be consistent with national crime laboratory best practices.

### 13.1.7 Special Details and Events Recommendations (Chapter 11.1)

Recommendation 33: BPD leaders should work with ITS and BCIT to ensure they maintain awareness of officer assignments and other resources. As with day-to-day operations, special events highlight the importance of having an accurate database to track officer assignments, shifts, and timecards to allow departmental leaders to maintain situational awareness of their deployed officers and resources, and to adjust as necessary. ${ }^{304}$

Recommendation 34: BPD should establish processes and protocols that preclude the need to pull police officers out of district patrol to staff events and other planned details. This may include creating a 'special events unit' or 'details unit' that staffs all special events and details. Additionally, BPD should work to identify ways to off-set the cost of such staffing.

[^73]Recommendation 35: BPD should make focused efforts to increase civilianization within the department.

- The department should work to quickly identify positions currently filled by sworn personnel that could be filled by civilians. The department should use the civilianization study conducted by the BPD CFO in 2017 to begin the process. Those positions should be transitioned and sworn personnel should be moved to fill sector patrol positions.
- Working with the City of Baltimore, BPD Human Resources should evaluate and document the business processes and the skillsets of personnel in each Unit of the department within BPD. As part of a broader effort to improve efficiencies within the department, BPD should make serious efforts to evaluate business processes and all positions throughout the department currently filled with sworn officers to determine if those positions could be filled by civilian personnel. This will increase the number of civilian opportunities and free up sworn staff to return to sector patrol. Each Unit should create documented roles and responsibilities for each position.
- Based on these revised roles and responsibilities, BPD should refresh the department civilianization plan and work to fill professional civilian positions within the department. This strategy will professionalize non-sworn positions resulting in better service and a cost savings.
- BPD should place sworn officers in positions that require sworn skillsets.


### 13.2 Methodology Detail

The Police Foundation, in partnership with BPD, assembled an assessment team including subject matter experts with extensive experience in law enforcement policies and practice, staffing data analyses and organizational reviews to produce this study. The PF team developed a comprehensive methodology, to "assess the appropriate number of sworn and civilian personnel to perform the functions necessary for BPD to fulfill its mission, enable supervision, and satisfy the requirements of [the consent decree]."305

The assessment approach involved three means of information gathering and collection: (1) onsite data collection, (2) off-site data collection and resource material review, and (3) data analysis. Each method is described in more detail below. Based on the analysis of this comprehensive body of information, the PF team developed the staffing study and observations contained in this report.

### 13.2.1 On-Site Data Collection

The PF team conducted six site visits in 2017 and 2018: September 28-29, 2017; November 2-3, 2017; December 19, 2017; March 13, 2018; March 19-20, 2018; and April 16, 2018. During these site visits, the assessment team conducted semi-structured individual interviews and focus groups with current and former BPD personnel. More than 36 interviews and focus groups were conducted over the course of these site visits, including with the following:

## Leadership of and within the following divisions, sections, and units ${ }^{306}$

- Body Worn Camera Unit
- CitiWatch
- Citywide Burglary
- Citywide Robbery
- Communications
- Compliance, Accountability \& External Affairs Division
- Criminal Intelligence Unit
- Criminal Investigations Bureau
- Crisis Intervention Team/Homeless

Outreach Team/Law Enforcement Assistance Diversion

- District Detective Section
- Forensic Science \& Evidence Management Division

Homicide Section

- Management Services Division, including Human Resources
- Office of Professional Responsibility
- Patrol Bureau
- Performance Measures \& Efficiencies
- Police Training Academy
- Records Management Section
- Recruitment \& Staffing Section
- Special Investigations Section
- Special Operations Division
- Use of Force Assessment Unit
- Warrant Apprehension Task Force/Maryland Coordination and Analysis Center/Task Force Groups


## Other Individuals

[^74]- Former Commissioner Kevin Davis
- Former Commissioner Darryl De Sousa
- Former deputy commissioners


## Focus Groups

- Patrol lieutenants
- Patrol sergeants
- Director, Mayor's Office of Criminal Justice
- Director, Mayor's Office of Innovation
- Police officers assigned to sector patrol

While on-site, PF team members also observed BPD's Comstat process and toured some of BPD's facilities to better understand departmental business processes.

### 13.2.2 Off-Site Data Collection and Resource Review

In addition to interviews conducted on-site, the PF team participated in bi-weekly phone calls with BPD, DOJ, and Monitoring team participants and conducted other conference calls with individuals from BPD for information to supplement on-site interviews and materials received. As the Police Foundation also developed the BPD Technology Resource Study, fulfilling Paragraph 268 of the consent decree, PF team members had access to information gathered from the resource assessment as well as those gathered specifically for this staffing study.

The PF team collected and reviewed relevant BPD policies, procedures, data, reports, and other documents provided by BPD. Each resource was reviewed to better understand BPD processes and staffing. Materials reviewed included the following:

- Departmental policies, procedures, memos, and requests for proposal
- Department organizational and staffing documentation
- Caseload data and information
- Sample field reports
- Sample Comstat packets and district preparation materials for Comstat


### 13.2.3 Data Analysis

## Patrol

Following the workload analysis model, a comprehensive analysis of patrol is designed to determine the number of officers required to handle calls for service in a city and allows for adequate unallocated time for self-initiated activity (including community engagement and other leadership-defined priorities). The analysis should account for all variables including but not limited to response time, time on scene, and report writing time, for all police officers assigned to the call.

The first step of the analysis used calls for service (CFS) records pulled from the BPD computer aided dispatch (CAD) system for the period July 1, 2016 - June 30, 2017. ${ }^{307}$ Using this data,

[^75]Chapter 4.2 provides an overview of BPD's 911 CFS call priority and response time. After organizing and cleaning the data, PF team members generated citywide calls for service counts by priority type and average response time for each priority type.

Team members then converted and separated the CAD CFS data by each of the nine patrol districts. The PF team used this data to conduct preliminary analyses of each district for 911 CFS and self-initiated types of police officer activity. The PF team generated the average number of CFS for each district and identified the most frequent types of dispatched CFS as well as the most frequent types of self-initiated activities recorded in CAD. The PF team also calculated the average amount of police officer time spent answering CFS, self-initiated activities, and details. Based on these calculations, the PF team calculated the average total amount of time consumed for each district. These were compared to staffing weekly hours derived from February 3-20, 2018 shift strength reports to provide district-level summaries of current demand for police officer time.

Finally, the team requested payroll data from January 1, 2017 through December 31, 2017 with leave codes. The payroll data was used to calculate vacation, holidays, sick leave, training time and other leave or activity time that takes officers out of the patrol function. These provided the amount of focused patrol time officers are available to actually 'work the street.' The PF team also requested lists of officers assigned to each district in January and December of 2017 to generate lists of officers who worked in the district for the full year.

After extensive cleaning and organizing, the data provided the average amount of time over the course of a year that officers are available for patrol functions. Considering BPD's existing average CFS and self-initiated workloads, the PF team calculated the number of officers needed for each district to handle CFS and self-initiated activities for 60 percent of time focused on responding to CFS and 40 percent of time for priorities directed by the agency, specifically community engagement, problem solving, and other self-initiated activities. This analysis (outlined in Table 14) provides the results of the workload analysis with recommended number of police officers assigned to sector patrol necessary to serve the city of Baltimore.

The data analyses conducted are based on the accuracy of the data used. A reliable analysis thus depends on extensive, consistent, and accurate data such that workload can be measured in the total time required to handle a particular call type. As the BPD Technology Resource Study (submitted to the Court in June 2018) notes in more detail, data entries may not always be entered into systems properly, policy and protocol may not be followed, and a reliance on multiple different systems may encourage discrepancies. As an example, the PF data analyst found that in many instances the data field for officers' arrival time on scene was left blank. This means that either the officer did not call in his arrival on-scene to communications, or it was not entered into CAD by dispatch personnel. Either way, this absence of data could artificially inflate response times for calls for service. For this reason, those CFS without arrival times listed were removed from our data set. A number of other limitations are noted in each of the analysis sections.

Although imprecise due to data limitations, the PF team believes that this analysis is an accurate analysis and estimation of required patrol staffing requirements. This analysis can provide BPD with a solid foundation on which to build a staffing plan that will set BPD up for successful policing in Baltimore.

## Investigations

The PF team intended to conduct a workload analysis, and so requested caseload, case time, and staffing level information from each investigative unit for the year 2017. Since staffing information fluctuated over time, particularly as units were reorganized, the assessment team used staffing charts from April 30, 2018. As in the patrol workload analysis, to evaluate investigative staffing based on current caseload, the assessment team also requested payroll data from the units from January 1, 2017 through December 31, 2017 with leave codes.

The assessment team also requested lists of officers assigned to each unit in January and December of 2017 to be able to generate lists of officers who worked in investigative units for the entire year. After considerable cleaning, this data provided the average amount of time over the course of a year that officers are available for investigative duties.

Unfortunately, BPD does not keep track of case time information or use a formal solvability system that would help to categorize and estimate the time required to fully investigate cases. Thus, in the analysis section, the PF team attempted to use proxy data from past staffing studies—namely a 2008 staffing study of the San Francisco Police Department ${ }^{308}$ and 2012 staffing study of the Austin Police Department ${ }^{309}$ - which were selected based on their comparability as large departments and availability of comparative information.

For the homicide section, the PF team did use best practice ratios to estimate homicide unit staffing. Drawing primarily from the Bureau of Justice Assistance report Homicide Process Mapping: Best Practices for Increasing Homicide Clearances by Dr. Carter, the assessment team estimates best practice staffing targets for homicide detectives working active cases based on BPD homicide caseload in the homicide workload analysis chapter.

For all of the other investigative units, however, after considerable work by the PF team to make the Austin and San Francisco data work as proxies for actual BPD case investigation time, the team came to understand that too many variables impact how long it takes to investigate a case to use data from just two other police departments in place of actual BPD time data. The team simply was not comfortable with any analysis that did not use Baltimore-specific data.

[^76]Were BPD to document and use unit-specific case time organized by solvability factors information, the department could conduct an accurate analysis using the caseload and case time methodology in the future. However, the analysis and information displayed in Chapter 6: Analyses of Baltimore Police Investigations Staffing can begin to provide a better understanding of staffing areas of concern.

### 13.2.4 Application of Recommendations

The PF team used the totality of the information collected to conduct workload analyses and produce a series of recommendations for developing the future staffing plan, listed at the end of each related chapter in this report.

### 13.3 BPD Organization Chart



Source: Baltimore Police Department. (2018, May 15). Baltimore Police Department Organizational Chart. Retrieved from
https://www.baltimorepolice.org/sites/default/files/General\ Website\ PDFs/BPDOrgChart.pdf

### 13.4 Comparable Cities Organizational Charts

Figure 21: Denver Police Department Organizational Chart


Source: Planning, Research and Support. (2017, June 4). Organizational Chart. Denver Police Department. Retrieved from
https://www.denvergov.org/content/dam/denvergov/Portals/720/documents/PoliceDeptOrgChart.pdf

Figure 22: Oakland Police Department Organizational Chart


Source: Oakland Police Department. (2017, October). Organization Chart. Retrieved from
http://www2.oaklandnet.com/government/o/OPD/a/org/index.htm

Figure 23: Seattle Police Department Organizational Chart


Source: Seattle Police Department. (n.d.). Leading Police Reform: The Seattle Police Department's Strategies for the Future. Retrieved from
https://www.seattle.gov/Documents/Departments/Police/Publications/Leading Police Reform.pdf


Figure 24: Memphis Police Department Organizational Chart


Source: Memphis Police Department. (2017, July). Organizational Structure. Retrieved from http://www.memphispolice.org/pdf/Organizational Chart July 2017.pdf

Figure 25: Metropolitan Police Department Organizational Chart


Source: Metropolitan Police Department. (2018, March 30). Organizational Chart. Retrieved from https://mpdc.dc.gov/sites/default/files/dc/sites/mpdc/publication/attachments/MPD\ 0rganizational\ C harts 033018.pdf


Figure 26: Detroit Police Department Organizational Chart


Source: Detroit Police Department. (2015). Detroit Police Department: 2015 Annual Report. Retrieved from https://www.scribd.com/document/312605928/2015-Annual-Report-Detroit-Police-Department

Figure 27: New Orleans Police Department Organizational Chart

## Office of the Superintendent



Source: New Orleans Police Department. (n.d.). Office of the Superintendent. Retrieved from https://www.nola.gov/getattachment/NOPD/About-Us/Bureaus/NOPD-ORGANIZATIONAL-STRUCTURE.pdf/

Figure 28: Cleveland Police Department Organizational Chart


Source: City of Cleveland Department of Public Safety. (2011, January 3). Division of Police Organizational Structure. Retrieved from
http://www.city.cleveland.oh.us/sites/default/files/forms_publications/CPDOrgChart.pdf?id=2889


Figure 29: Newark Police Division Organizational Chart


Source: Newark Police Division. (2018, March 5). Newark Police Division Organizational Plan. Provided to assessment team from Newark Police Division employee via email May 11, 2018.
13.5 BPD Districts Map


Source: Baltimore Police Department. (n.d.)."Districts." Retrieved from
https://www.baltimorepolice.org/districts/find-my-district

### 13.6 Calls for Service Analysis Data Tables

Each of the tables in this Appendix provides more detailed information for each district's existing calls for service and average weekly staffing hours. For each of the following tables:

- Table District A displays the top 20 most frequent types of calls for service dispatched for each district. Only calls that were otherwise cleared are counted.
- Table District B displays the top 20 most frequent types of activities captured by the CAD system as self-initiated for each district. As activities labeled "detail," are also included under self-initiated in CAD, they are reflected in these tables.
- Table District $C$ displays the average number of hours of dispatched calls for service by hour of the day and day of the week for each district. ${ }^{310}$
- Table District D displays the number of officers working each district by hours of the day and day of the week. ${ }^{311}$
- Table District E displays the average percentage of officer time consumed by calls for service, finding the average for each hour with the same data that was used for Tables C and $D$. The hour blocks of time indicating that on average officers spend more than 60 percent of that hour responding to calls for service are shaded gray. In some cases, the time blocks display a figure of 100 percent or more, possibly indicating that there are not enough officers in service during that time to cover the workload during the year period.
- Table District F displays the average percentage of officer time consumed by activities labeled as self-initiated, not including time labeled as "detail," finding the average for each hour with data from Table D and the average number of hours of self-initiated activities for each time block.

Tables A, B, C, E, and F are based on the July 1, 2016-June 30, 2017 calls for service data Tables D, E, and F are based on the February 3-20, 2018 shift strength reports. While BPD later provided the assessment team more recent data, which was reviewed for consistency, the charts and analyses below are based on the February 2018 information.

The information from these tables correspond to Table 13: Summary of BPD District Staffing Analysis in the Patrol Analyses of Baltimore Police Services. It can be used to inform the

[^77]department on current levels of calls for service by district and hour and to identify particular time blocks that may warrant more attention.

### 13.6.1 Central District

Table Central A: Most Frequent Calls for Service
District Dispatched Calls for Service: ${ }^{312} 104,966$
Number of Dispatched Calls in the Most Frequent Calls for Service List: 85,485
Percentage of Dispatched Calls that are in the Most Frequent Calls for Service List: 81 percent

| Dispatched Call Type | Number |
| :--- | ---: |
| 55 - DISORDERLY PERSON | 16522 |
| $89-911 /$ NO VOICE CALL | 14923 |
| 79 - OTHER | 8821 |
| $4 E$ - COMMON ASSAULT | 8486 |
| 30 - ACCIDENT-AUTO | 5369 |
| 870 - NARCOTICS - OUTSIDE | 4699 |
| $6 J$ - LARCENY- OTHER | 3493 |
| 65 - SILENT ALARM | 3257 |
| $5 G-$ BURGLARY | 2581 |
| 54 - ARMED PERSON | 2363 |
| 49 - FAMILY DISTURBANCE | 2309 |
| 57 - SUSPICIOUS PERSON | 1811 |
| 99 - ACCIDENT-HIT \& RUN | 1747 |
| 75 - DESTRUCT. OF PROPERTY | 1553 |
| $4 D-$ AGG ASSAULT - HANDS | 1497 |
| $6 D ~-~ L A R C E N Y-~ F R O M ~ A U T O ~$ | 1323 |
| 31 - ACCIDENT-PERSON INJ. | 1319 |
| $3 N ~-~ R O B B ~ M I S C ~(A) ~$ | 1309 |
| $7 C ~-~ S T O L E N ~ V E H . / O T H E R ~$ | 1063 |
| 85 - BEHAVIORAL CRISIS | 1040 |

## Table Central B: Most Frequent Self-Initiated Activities

District Records Labeled Self-Initiated: ${ }^{313} 6,538$
Number of Activities in the Most Frequent Self-Initiated Activities List: 5,899
Percentage of Dispatched Calls that are in the Most Frequent Calls for Service List: 90 percent

[^78]| Dispatched Call Type | Number |
| :---: | :---: |
| 20D - DETAIL | 2895 |
| 25 - CAR STOP | 759 |
| FI - FIELD INTERVIEW | 550 |
| 61 - PERSON WANTED ON WAR | 250 |
| 79 - OTHER | 208 |
| 30 - ACCIDENT-AUTO | 181 |
| 6 J - LARCENY- OTHER | 124 |
| 60 - SICK PERSON | 122 |
| 81 - RECOVERED PROPERTY | 112 |
| 20B - FOOT PATROL | 85 |
| 55 - DISORDERLY PERSON | 75 |
| 4E - COMMON ASSAULT | 70 |
| 80 - LOST PROPERTY | 69 |
| 87 - NARCOTICS - INSIDE | 67 |
| 58 - INJURED PERSON | 59 |
| 20F - WARRANT | 58 |
| 24 - TOWED VEHICLE | 58 |
| 31 - ACCIDENT-PERSON INJ. | 58 |
| 6D - LARCENY- FROM AUTO | 50 |
| 20Z-OTHER | 49 |

## Table Central C: Calls for Service Time in Hours

| Hour | Sun | Mon | Tue | Wed | Thu | Fri | Sat |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 0000 | 6.6 | 8.4 | 8.7 | 9.1 | 7.5 | 8.5 | 11.0 |
| 0100 | 9.8 | 7.0 | 7.9 | 8.1 | 7.2 | 6.8 | 10.5 |
| 0200 | 8.8 | 6.0 | 6.4 | 6.6 | 6.0 | 5.9 | 11.0 |
| 0300 | 8.0 | 5.0 | 5.2 | 6.3 | 5.0 | 5.6 | 8.6 |
| 0400 | 7.0 | 4.1 | 4.4 | 5.5 | 4.1 | 5.3 | 7.8 |
| 0500 | 5.1 | 3.7 | 4.1 | 4.8 | 3.7 | 4.3 | 6.0 |
| 0600 | 4.5 | 3.9 | 4.4 | 4.4 | 3.6 | 4.4 | 5.0 |
| 0700 | 3.8 | 4.2 | 4.1 | 4.3 | 3.8 | 4.1 | 4.4 |
| 0800 | 3.9 | 5.2 | 5.5 | 5.7 | 5.6 | 5.4 | 4.8 |
| 0900 | 4.5 | 6.4 | 6.3 | 6.3 | 6.2 | 6.3 | 5.3 |
| 1000 | 4.4 | 7.3 | 6.4 | 7.1 | 6.6 | 6.6 | 6.2 |
| 1100 | 5.2 | 7.5 | 6.8 | 7.8 | 7.4 | 7.2 | 7.1 |
| 1200 | 5.7 | 8.0 | 7.3 | 7.5 | 7.5 | 7.7 | 7.2 |
| 1300 | 5.8 | 7.9 | 7.6 | 7.5 | 7.6 | 8.2 | 7.1 |
| 1400 | 5.9 | 7.7 | 7.2 | 7.5 | 7.8 | 8.6 | 6.6 |
| 1500 | 6.3 | 8.1 | 7.4 | 7.8 | 7.8 | 9.4 | 6.6 |
| 1600 | 5.8 | 7.7 | 7.3 | 7.5 | 6.7 | 9.7 | 6.8 |


| 1700 | 6.9 | 9.5 | 9.7 | 9.4 | 8.4 | 7.9 | 6.1 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 1800 | 7.2 | 9.4 | 9.9 | 9.1 | 8.5 | 9.1 | 7.2 |
| 1900 | 6.9 | 8.5 | 9.1 | 8.1 | 7.5 | 8.5 | 7.0 |
| 2000 | 6.5 | 7.9 | 8.4 | 7.5 | 7.2 | 7.7 | 6.7 |
| 2100 | 6.4 | 7.6 | 7.7 | 6.9 | 7.2 | 7.5 | 7.3 |
| 2200 | 6.3 | 7.6 | 7.8 | 6.7 | 8.2 | 8.2 | 6.8 |
| 2300 | 7.9 | 8.3 | 9.0 | 7.8 | 7.9 | 10.8 | 7.7 |
|  |  |  |  |  |  |  | 1155.6 |

Table Central D: Staffing Weekly Hours

| Hour | Sun | Mon | Tue | Thu | Sat |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 0000 | 19 | 24 | 24 | 24 | 24 | 24 | 10 |
| 0100 | 19 | 24 | 24 | 24 | 24 | 24 | 10 |
| 0200 | 19 | 13 | 9 | 10 | 10 | 10 | 15 |
| 0300 | 7 | 13 | 9 | 10 | 10 | 10 | 10 |
| 0400 | 7 | 13 | 9 | 10 | 10 | 10 | 10 |
| 0500 | 7 | 13 | 9 | 10 | 10 | 10 | 10 |
| 0600 | 7 | 13 | 9 | 10 | 10 | 10 | 10 |
| 0700 | 22 | 25 | 22 | 24 | 25 | 24 | 20 |
| 0800 | 10 | 12 | 13 | 14 | 15 | 14 | 10 |
| 0900 | 10 | 12 | 13 | 14 | 15 | 14 | 10 |
| 1000 | 10 | 12 | 13 | 14 | 15 | 14 | 10 |
| 1100 | 10 | 12 | 13 | 14 | 15 | 14 | 10 |
| 1200 | 10 | 12 | 13 | 10 | 15 | 13 | 10 |
| 1300 | 10 | 12 | 13 | 10 | 15 | 13 | 10 |
| 1400 | 10 | 12 | 13 | 10 | 15 | 13 | 10 |
| 1500 | 10 | 12 | 13 | 10 | 15 | 13 | 10 |
| 1600 | 22 | 23 | 28 | 24 | 19 | 13 | 10 |
| 1700 | 12 | 11 | 15 | 14 | 14 | 14 | 10 |
| 1800 | 12 | 11 | 15 | 14 | 14 | 14 | 10 |
| 1900 | 12 | 11 | 15 | 14 | 14 | 14 | 10 |
| 2000 | 12 | 11 | 15 | 14 | 14 | 14 | 10 |
| 2100 | 12 | 11 | 15 | 14 | 14 | 14 | 10 |
| 2200 | 19 | 24 | 24 | 24 | 24 | 24 | 10 |
| 2300 | 19 | 24 | 24 | 24 | 24 | 24 | 15 |
|  |  |  |  |  |  |  | 2398.0 |

Table Central E: Average Patrol Time Consumed by Calls for Service

| Hour | lun | Mon | Tue | Wed | Thu | Fri | Sat |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 0000 | $34.6 \%$ | $34.8 \%$ | $36.1 \%$ | $37.7 \%$ | $31.1 \%$ | $35.4 \%$ | $109.5 \%$ |
| 0100 | $51.3 \%$ | $29.2 \%$ | $33.0 \%$ | $33.6 \%$ | $30.1 \%$ | $28.4 \%$ | $105.0 \%$ |
| 0200 | $46.5 \%$ | $46.2 \%$ | $71.5 \%$ | $66.0 \%$ | $60.3 \%$ | $58.7 \%$ | $73.4 \%$ |
| 0300 | $114.5 \%$ | $38.1 \%$ | $57.6 \%$ | $62.5 \%$ | $49.5 \%$ | $55.7 \%$ | $85.5 \%$ |
| 0400 | $99.3 \%$ | $31.8 \%$ | $48.7 \%$ | $54.5 \%$ | $40.8 \%$ | $53.2 \%$ | $77.7 \%$ |
| 0500 | $73.1 \%$ | $28.5 \%$ | $45.7 \%$ | $47.5 \%$ | $36.7 \%$ | $42.8 \%$ | $59.8 \%$ |
| 0600 | $63.8 \%$ | $30.1 \%$ | $48.7 \%$ | $43.8 \%$ | $35.8 \%$ | $43.7 \%$ | $50.0 \%$ |


| 0700 | $17.3 \%$ | $16.8 \%$ | $18.6 \%$ | $18.1 \%$ | $15.1 \%$ | $17.2 \%$ | $21.8 \%$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 0800 | $39.3 \%$ | $43.2 \%$ | $42.6 \%$ | $41.0 \%$ | $37.0 \%$ | $38.6 \%$ | $48.0 \%$ |
| 0900 | $45.2 \%$ | $53.5 \%$ | $48.1 \%$ | $45.2 \%$ | $41.4 \%$ | $44.8 \%$ | $53.0 \%$ |
| 1000 | $44.3 \%$ | $61.0 \%$ | $48.8 \%$ | $50.7 \%$ | $43.9 \%$ | $47.3 \%$ | $61.7 \%$ |
| 1100 | $51.5 \%$ | $62.5 \%$ | $52.4 \%$ | $55.5 \%$ | $49.1 \%$ | $51.3 \%$ | $70.8 \%$ |
| 1200 | $57.0 \%$ | $66.5 \%$ | $55.8 \%$ | $74.5 \%$ | $49.9 \%$ | $59.4 \%$ | $71.7 \%$ |
| 1300 | $57.8 \%$ | $65.8 \%$ | $58.3 \%$ | $75.2 \%$ | $50.9 \%$ | $62.9 \%$ | $71.0 \%$ |
| 1400 | $59.2 \%$ | $63.9 \%$ | $55.3 \%$ | $74.8 \%$ | $51.9 \%$ | $65.9 \%$ | $66.2 \%$ |
| 1500 | $63.0 \%$ | $67.5 \%$ | $57.1 \%$ | $77.5 \%$ | $51.9 \%$ | $72.6 \%$ | $66.3 \%$ |
| 1600 | $26.2 \%$ | $33.3 \%$ | $26.1 \%$ | $31.0 \%$ | $35.0 \%$ | $74.7 \%$ | $67.8 \%$ |
| 1700 | $57.4 \%$ | $86.4 \%$ | $64.6 \%$ | $67.0 \%$ | $59.9 \%$ | $56.7 \%$ | $61.0 \%$ |
| 1800 | $60.1 \%$ | $85.5 \%$ | $66.1 \%$ | $64.6 \%$ | $61.0 \%$ | $65.1 \%$ | $72.2 \%$ |
| 1900 | $57.6 \%$ | $76.8 \%$ | $60.4 \%$ | $58.0 \%$ | $53.6 \%$ | $60.5 \%$ | $69.8 \%$ |
| 2000 | $54.2 \%$ | $71.7 \%$ | $55.8 \%$ | $53.2 \%$ | $51.1 \%$ | $55.2 \%$ | $66.8 \%$ |
| 2100 | $53.2 \%$ | $69.2 \%$ | $51.4 \%$ | $49.2 \%$ | $51.2 \%$ | $53.2 \%$ | $72.7 \%$ |
| 2200 | $33.0 \%$ | $31.8 \%$ | $32.4 \%$ | $27.8 \%$ | $34.0 \%$ | $34.1 \%$ | $68.0 \%$ |
| 2300 | $41.5 \%$ | $34.4 \%$ | $37.4 \%$ | $32.4 \%$ | $32.7 \%$ | $45.0 \%$ | $51.1 \%$ |
|  |  |  |  |  |  |  | $52.6 \%$ |

Table Central F: Average Patrol Time Consumed by Self-Initiated Activities

| Hour | Sun | Mon | Tue | Wed | Thu | lri | Sat |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 0000 | $6.8 \%$ | $4.7 \%$ | $6.1 \%$ | $6.7 \%$ | $9.0 \%$ | $9.8 \%$ | $20.5 \%$ |
| 0100 | $8.6 \%$ | $6.3 \%$ | $6.8 \%$ | $8.2 \%$ | $8.8 \%$ | $11.3 \%$ | $21.0 \%$ |
| 0200 | $10.4 \%$ | $12.1 \%$ | $17.4 \%$ | $19.8 \%$ | $17.8 \%$ | $21.7 \%$ | $14.0 \%$ |
| 0300 | $20.2 \%$ | $11.5 \%$ | $14.4 \%$ | $18.8 \%$ | $15.8 \%$ | $15.0 \%$ | $14.3 \%$ |
| 0400 | $13.6 \%$ | $10.5 \%$ | $11.1 \%$ | $16.8 \%$ | $15.2 \%$ | $12.5 \%$ | $13.8 \%$ |
| 0500 | $11.9 \%$ | $8.5 \%$ | $9.6 \%$ | $15.7 \%$ | $12.5 \%$ | $13.2 \%$ | $9.8 \%$ |
| 0600 | $11.9 \%$ | $5.4 \%$ | $8.5 \%$ | $11.7 \%$ | $9.7 \%$ | $11.2 \%$ | $9.8 \%$ |
| 0700 | $2.3 \%$ | $2.3 \%$ | $1.8 \%$ | $3.8 \%$ | $2.9 \%$ | $2.9 \%$ | $2.7 \%$ |
| 0800 | $3.5 \%$ | $4.7 \%$ | $3.6 \%$ | $6.1 \%$ | $4.1 \%$ | $3.2 \%$ | $4.8 \%$ |
| 0900 | $4.3 \%$ | $5.6 \%$ | $5.8 \%$ | $5.8 \%$ | $5.0 \%$ | $4.3 \%$ | $6.2 \%$ |
| 1000 | $6.7 \%$ | $5.7 \%$ | $5.9 \%$ | $5.7 \%$ | $5.7 \%$ | $5.7 \%$ | $8.2 \%$ |
| 1100 | $8.3 \%$ | $8.2 \%$ | $5.9 \%$ | $7.9 \%$ | $6.8 \%$ | $8.1 \%$ | $9.0 \%$ |
| 1200 | $9.2 \%$ | $10.3 \%$ | $7.4 \%$ | $9.3 \%$ | $8.2 \%$ | $8.2 \%$ | $9.3 \%$ |
| 1300 | $9.3 \%$ | $11.5 \%$ | $7.6 \%$ | $10.8 \%$ | $6.6 \%$ | $9.1 \%$ | $8.0 \%$ |
| 1400 | $6.8 \%$ | $10.8 \%$ | $7.2 \%$ | $9.7 \%$ | $5.3 \%$ | $8.2 \%$ | $6.2 \%$ |
| 1500 | $7.7 \%$ | $11.3 \%$ | $7.7 \%$ | $10.7 \%$ | $5.1 \%$ | $7.7 \%$ | $5.3 \%$ |
| 1600 | $2.4 \%$ | $5.0 \%$ | $3.2 \%$ | $3.8 \%$ | $4.8 \%$ | $8.2 \%$ | $5.5 \%$ |
| 1700 | $5.0 \%$ | $7.0 \%$ | $5.4 \%$ | $6.4 \%$ | $6.8 \%$ | $6.2 \%$ | $7.0 \%$ |
| 1800 | $6.3 \%$ | $6.7 \%$ | $7.9 \%$ | $7.7 \%$ | $6.2 \%$ | $5.2 \%$ | $9.2 \%$ |
| 1900 | $5.4 \%$ | $7.1 \%$ | $8.3 \%$ | $8.5 \%$ | $7.5 \%$ | $6.9 \%$ | $8.5 \%$ |
| 2000 | $4.4 \%$ | $8.2 \%$ | $9.2 \%$ | $10.0 \%$ | $7.5 \%$ | $6.3 \%$ | $11.5 \%$ |
| 2100 | $5.3 \%$ | $8.0 \%$ | $7.0 \%$ | $8.9 \%$ | $8.5 \%$ | $5.5 \%$ | $13.0 \%$ |
| 2200 | $4.4 \%$ | $4.0 \%$ | $4.0 \%$ | $6.5 \%$ | $5.6 \%$ | $4.3 \%$ | $11.8 \%$ |
| 2300 | $6.2 \%$ | $4.8 \%$ | $5.6 \%$ | $7.9 \%$ | $8.4 \%$ | $6.0 \%$ | $9.4 \%$ |
|  |  |  |  |  |  |  | $8.3 \%$ |

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### 13.6.2 Southeastern District

## Table Southeastern A: Most Frequent Calls for Service

District Dispatched Calls for Service: ${ }^{314} 112,567$
Number of Dispatched Calls in the Most Frequent Calls for Service List: 88,638
Percentage of Dispatched Calls that are in the Most Frequent Calls for Service List: 79 percent

| Dispatched Call Type | Number |
| :---: | :---: |
| 55 - DISORDERLY PERSON | 14574 |
| 4E - COMMON ASSAULT | 9544 |
| 89-911/NO VOICE CALL | 8102 |
| 79 - OTHER | 7531 |
| 65 - SILENT ALARM | 6072 |
| 5G - BURGLARY | 5505 |
| 30 - ACCIDENT-AUTO | 4968 |
| 6 J - LARCENY- OTHER | 3730 |
| 49 - FAMILY DISTURBANCE | 3484 |
| 870 - NARCOTICS OUTSIDE | 3292 |
| 57 - SUSPICIOUS PERSON | 3145 |
| 75 - DESTRUCT. OF PROPERTY | 2413 |
| 54 - ARMED PERSON | 2412 |
| 6D - LARCENY-FROM AUTO | 2321 |
| 99 - ACCIDENT-HIT \& RUN | 2264 |
| 33 - PARKING COMPLAINT | 2154 |
| 3 N - ROBB MISC (A) | 1973 |
| 4D - AGG ASSAULT - HANDS | 1946 |
| 7C - STOLEN VEH./OTHER | 1608 |
| 68 - LOUD NOISE | 1600 |

Table Southeastern B: Most Frequent Self-Initiated Activities
District Records Labeled Self-Initiated: ${ }^{315} 6,237$
Number of Activities in the Most Frequent Self-Initiated Activities List: 5,514
Percentage of Dispatched Calls that are in the Most Frequent Calls for Service List: 88 percent

[^79]| Dispatched Call Type | Number |
| :---: | :---: |
| 20D - DETAIL | 1850 |
| FI- FIELD INTERVIEW | 1016 |
| 25 - CAR STOP | 578 |
| 20F - WARRANT | 292 |
| 79 - OTHER | 283 |
| 30 - ACCIDENT-AUTO | 266 |
| 20Z- OTHER | 167 |
| 61 - PERSON WANTED ON WAR | 116 |
| 31 - ACCIDENT-PERSON INJ. | 110 |
| 6 J - LARCENY- OTHER | 103 |
| 81 - RECOVERED PROPERTY | 90 |
| 4E - COMMON ASSAULT | 89 |
| $60-$ SICK PERSON | 81 |
| 75 - DESTRUCT. OF PROPERTY | 80 |
| 6D - LARCENY- FROM AUTO | 76 |
| 20A - FOLLOWUP | 71 |
| 99 - ACCIDENT-HIT \& RUN | 70 |
| 55 - DISORDERLY PERSON | 65 |
| 3N - ROBB MISC (A) | 60 |
| 5G - BURGLARY | 51 |

Table Southeastern C: Calls for Service Time in Hours

| Hour | Sun | ll | luen | Wed | Thu | Fri | Sat |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 0000 | 10.2 | 12.1 | 11.5 | 9.6 | 11.5 | 11.6 | 13.9 |
| 0100 | 14.5 | 10.7 | 10.0 | 7.8 | 9.2 | 9.1 | 12.6 |
| 0200 | 12.2 | 7.7 | 6.9 | 6.0 | 6.3 | 6.4 | 11.8 |
| 0300 | 10.7 | 7.3 | 6.3 | 5.8 | 5.7 | 5.8 | 8.8 |
| 0400 | 8.3 | 6.1 | 5.5 | 5.2 | 5.3 | 5.7 | 6.8 |
| 0500 | 7.7 | 4.9 | 4.4 | 4.5 | 4.4 | 4.8 | 6.0 |
| 0600 | 6.2 | 5.4 | 4.5 | 4.9 | 4.2 | 5.2 | 5.4 |
| 0700 | 5.0 | 5.7 | 4.8 | 5.3 | 4.7 | 5.3 | 5.2 |
| 0800 | 5.6 | 8.3 | 7.1 | 7.6 | 6.2 | 7.2 | 6.6 |
| 0900 | 6.5 | 9.4 | 8.1 | 8.0 | 7.5 | 8.2 | 7.4 |
| 1000 | 8.0 | 9.1 | 8.7 | 8.7 | 8.2 | 8.9 | 8.3 |
| 1100 | 8.1 | 9.1 | 9.9 | 9.8 | 8.7 | 9.8 | 9.0 |
| 1200 | 8.9 | 10.3 | 10.0 | 10.6 | 9.5 | 10.4 | 9.3 |
| 1300 | 10.0 | 10.6 | 10.5 | 11.1 | 9.9 | 11.2 | 10.7 |
| 1400 | 10.7 | 10.8 | 11.1 | 10.2 | 10.2 | 10.9 | 10.7 |
| 1500 | 11.7 | 11.4 | 11.8 | 11.6 | 10.7 | 11.1 | 11.1 |
| 1600 | 10.5 | 9.8 | 10.4 | 10.3 | 9.1 | 11.7 | 11.0 |


| 1700 | 10.5 | 11.8 | 11.1 | 12.0 | 11.1 | 10.8 | 9.5 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 1800 | 11.0 | 12.8 | 11.2 | 12.0 | 12.4 | 12.3 | 11.1 |
| 1900 | 11.2 | 12.2 | 11.6 | 12.3 | 12.4 | 12.4 | 11.2 |
| 2000 | 11.6 | 12.9 | 12.2 | 12.5 | 11.8 | 12.7 | 11.2 |
| 2100 | 11.7 | 13.1 | 11.4 | 12.5 | 12.4 | 12.5 | 11.7 |
| 2200 | 11.8 | 12.6 | 11.0 | 12.4 | 12.4 | 13.2 | 11.4 |
| 2300 | 13.4 | 11.7 | 11.9 | 12.4 | 12.9 | 14.4 | 12.1 |
|  |  |  |  |  |  |  | 1596.9 |

Table Southeastern D: Staffing Weekly Hours

| Hour | Sun | Mon | Tue | Thu | Fat |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 0000 | 27 | 22 | 25 | 30 | 28 | 31 | 29 |
| 0100 | 27 | 22 | 25 | 30 | 28 | 31 | 29 |
| 0200 | 27 | 10 | 12 | 13 | 13 | 15 | 29 |
| 0300 | 13 | 10 | 12 | 13 | 13 | 15 | 16 |
| 0400 | 13 | 10 | 12 | 13 | 13 | 15 | 16 |
| 0500 | 13 | 10 | 12 | 13 | 13 | 15 | 16 |
| 0600 | 13 | 10 | 12 | 13 | 13 | 15 | 16 |
| 0700 | 27 | 24 | 29 | 29 | 30 | 30 | 31 |
| 0800 | 14 | 14 | 17 | 16 | 17 | 15 | 15 |
| 0900 | 14 | 14 | 17 | 16 | 17 | 15 | 15 |
| 1000 | 14 | 14 | 17 | 16 | 17 | 15 | 15 |
| 1100 | 14 | 14 | 17 | 16 | 17 | 15 | 15 |
| 1200 | 12 | 12 | 17 | 16 | 17 | 15 | 15 |
| 1300 | 12 | 12 | 17 | 16 | 17 | 15 | 15 |
| 1400 | 12 | 12 | 17 | 16 | 17 | 15 | 15 |
| 1500 | 12 | 12 | 17 | 16 | 17 | 15 | 15 |
| 1600 | 27 | 26 | 34 | 31 | 33 | 15 | 15 |
| 1700 | 15 | 14 | 17 | 15 | 16 | 14 | 14 |
| 1800 | 15 | 14 | 17 | 15 | 16 | 14 | 14 |
| 1900 | 15 | 14 | 17 | 15 | 16 | 14 | 14 |
| 2000 | 15 | 14 | 17 | 15 | 16 | 14 | 14 |
| 2100 | 12 | 13 | 17 | 15 | 16 | 14 | 14 |
| 2200 | 12 | 25 | 30 | 28 | 31 | 29 | 24 |
| 2300 | 12 | 25 | 30 | 28 | 31 | 29 | 24 |
|  |  |  |  |  |  |  | 2979 |

Table Southeastern E: Average Patrol Time Consumed by Calls for Service

| Hour | Sun | Mon | Tue | Wed | Thu | Fri | Sat |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 0000 | $37.7 \%$ | $55.2 \%$ | $45.8 \%$ | $32.1 \%$ | $41.2 \%$ | $37.3 \%$ | $47.8 \%$ |
| 0100 | $53.6 \%$ | $48.8 \%$ | $39.9 \%$ | $25.8 \%$ | $33.0 \%$ | $29.4 \%$ | $43.6 \%$ |
| 0200 | $45.0 \%$ | $77.0 \%$ | $57.8 \%$ | $46.0 \%$ | $48.1 \%$ | $42.4 \%$ | $40.6 \%$ |
| 0300 | $82.3 \%$ | $72.8 \%$ | $52.6 \%$ | $44.7 \%$ | $43.5 \%$ | $38.9 \%$ | $54.8 \%$ |
| 0400 | $63.8 \%$ | $60.8 \%$ | $46.0 \%$ | $40.3 \%$ | $40.8 \%$ | $37.9 \%$ | $42.5 \%$ |
| 0500 | $58.8 \%$ | $48.8 \%$ | $36.3 \%$ | $34.7 \%$ | $33.5 \%$ | $32.2 \%$ | $37.7 \%$ |

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| 0600 | $47.4 \%$ | $54.0 \%$ | $37.6 \%$ | $37.8 \%$ | $32.4 \%$ | $34.4 \%$ | $34.0 \%$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 0700 | $18.6 \%$ | $23.8 \%$ | $16.6 \%$ | $18.3 \%$ | $15.6 \%$ | $17.6 \%$ | $16.7 \%$ |
| 0800 | $39.8 \%$ | $59.3 \%$ | $41.5 \%$ | $47.5 \%$ | $36.7 \%$ | $48.1 \%$ | $44.1 \%$ |
| 0900 | $46.4 \%$ | $66.8 \%$ | $47.8 \%$ | $49.8 \%$ | $44.0 \%$ | $54.3 \%$ | $49.1 \%$ |
| 1000 | $56.9 \%$ | $65.0 \%$ | $50.9 \%$ | $54.4 \%$ | $48.1 \%$ | $59.0 \%$ | $55.0 \%$ |
| 1100 | $58.1 \%$ | $65.0 \%$ | $58.1 \%$ | $61.1 \%$ | $51.2 \%$ | $65.1 \%$ | $60.2 \%$ |
| 1200 | $74.4 \%$ | $85.8 \%$ | $58.9 \%$ | $66.5 \%$ | $55.8 \%$ | $69.2 \%$ | $62.1 \%$ |
| 1300 | $83.1 \%$ | $88.5 \%$ | $62.0 \%$ | $69.4 \%$ | $58.3 \%$ | $74.9 \%$ | $71.0 \%$ |
| 1400 | $88.9 \%$ | $89.9 \%$ | $65.5 \%$ | $63.6 \%$ | $59.8 \%$ | $72.7 \%$ | $71.6 \%$ |
| 1500 | $97.6 \%$ | $94.6 \%$ | $69.5 \%$ | $72.2 \%$ | $62.8 \%$ | $74.1 \%$ | $74.2 \%$ |
| 1600 | $38.9 \%$ | $37.6 \%$ | $30.6 \%$ | $33.2 \%$ | $27.6 \%$ | $78.0 \%$ | $73.4 \%$ |
| 1700 | $70.2 \%$ | $84.5 \%$ | $65.1 \%$ | $79.9 \%$ | $69.4 \%$ | $77.1 \%$ | $67.9 \%$ |
| 1800 | $73.0 \%$ | $91.4 \%$ | $65.9 \%$ | $79.7 \%$ | $77.2 \%$ | $87.6 \%$ | $79.2 \%$ |
| 1900 | $74.6 \%$ | $87.4 \%$ | $68.0 \%$ | $82.0 \%$ | $77.4 \%$ | $88.8 \%$ | $80.0 \%$ |
| 2000 | $77.4 \%$ | $92.3 \%$ | $72.0 \%$ | $83.1 \%$ | $73.4 \%$ | $90.4 \%$ | $80.0 \%$ |
| 2100 | $97.5 \%$ | $101.0 \%$ | $67.2 \%$ | $83.3 \%$ | $77.6 \%$ | $89.5 \%$ | $83.2 \%$ |
| 2200 | $98.6 \%$ | $50.3 \%$ | $36.6 \%$ | $44.1 \%$ | $40.0 \%$ | $45.5 \%$ | $47.4 \%$ |
| 2300 | $111.9 \%$ | $46.6 \%$ | $39.7 \%$ | $44.2 \%$ | $41.5 \%$ | $49.6 \%$ | $50.4 \%$ |
|  |  |  |  |  |  |  | $57.8 \%$ |

Table Southeastern F: Average Patrol Time Consumed by Self-Initiated Activities

| Hour | Sun | Mon | Tue | Wed | Thu | lri | Sat |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 0000 | $7.3 \%$ | $8.6 \%$ | $8.8 \%$ | $5.5 \%$ | $7.6 \%$ | $5.9 \%$ | $5.5 \%$ |
| 0100 | $8.6 \%$ | $7.9 \%$ | $7.6 \%$ | $4.8 \%$ | $6.5 \%$ | $5.8 \%$ | $6.4 \%$ |
| 0200 | $7.9 \%$ | $13.2 \%$ | $9.7 \%$ | $5.6 \%$ | $10.6 \%$ | $7.7 \%$ | $7.3 \%$ |
| 0300 | $13.2 \%$ | $12.2 \%$ | $6.9 \%$ | $4.6 \%$ | $6.5 \%$ | $5.9 \%$ | $10.5 \%$ |
| 0400 | $7.2 \%$ | $9.5 \%$ | $5.4 \%$ | $4.7 \%$ | $5.0 \%$ | $5.8 \%$ | $8.5 \%$ |
| 0500 | $6.9 \%$ | $8.2 \%$ | $3.6 \%$ | $4.1 \%$ | $4.4 \%$ | $4.6 \%$ | $6.4 \%$ |
| 0600 | $4.7 \%$ | $7.5 \%$ | $3.2 \%$ | $4.4 \%$ | $3.1 \%$ | $3.9 \%$ | $4.7 \%$ |
| 0700 | $2.1 \%$ | $2.9 \%$ | $1.4 \%$ | $1.7 \%$ | $1.2 \%$ | $1.5 \%$ | $1.5 \%$ |
| 0800 | $3.6 \%$ | $3.0 \%$ | $2.7 \%$ | $3.1 \%$ | $2.8 \%$ | $3.3 \%$ | $3.1 \%$ |
| 0900 | $4.9 \%$ | $3.6 \%$ | $4.0 \%$ | $4.4 \%$ | $3.7 \%$ | $3.3 \%$ | $4.7 \%$ |
| 1000 | $3.9 \%$ | $5.6 \%$ | $5.7 \%$ | $5.0 \%$ | $4.7 \%$ | $4.9 \%$ | $5.4 \%$ |
| 1100 | $4.0 \%$ | $6.0 \%$ | $6.9 \%$ | $6.3 \%$ | $7.5 \%$ | $7.7 \%$ | $6.4 \%$ |
| 1200 | $5.0 \%$ | $7.8 \%$ | $7.2 \%$ | $8.2 \%$ | $8.6 \%$ | $9.2 \%$ | $6.4 \%$ |
| 1300 | $6.8 \%$ | $6.4 \%$ | $6.1 \%$ | $9.2 \%$ | $10.0 \%$ | $9.2 \%$ | $6.7 \%$ |
| 1400 | $8.2 \%$ | $6.4 \%$ | $6.2 \%$ | $10.1 \%$ | $8.7 \%$ | $10.0 \%$ | $6.2 \%$ |
| 1500 | $7.9 \%$ | $7.9 \%$ | $6.9 \%$ | $10.2 \%$ | $8.1 \%$ | $11.6 \%$ | $5.8 \%$ |
| 1600 | $3.0 \%$ | $3.0 \%$ | $2.6 \%$ | $3.8 \%$ | $2.9 \%$ | $13.2 \%$ | $6.6 \%$ |
| 1700 | $5.7 \%$ | $4.0 \%$ | $5.6 \%$ | $8.9 \%$ | $4.7 \%$ | $11.5 \%$ | $4.8 \%$ |
| 1800 | $5.4 \%$ | $5.7 \%$ | $6.8 \%$ | $10.1 \%$ | $8.1 \%$ | $10.0 \%$ | $5.6 \%$ |
| 1900 | $6.0 \%$ | $7.0 \%$ | $7.6 \%$ | $11.1 \%$ | $8.4 \%$ | $9.6 \%$ | $9.2 \%$ |
| 2000 | $6.6 \%$ | $7.5 \%$ | $9.0 \%$ | $13.1 \%$ | $8.9 \%$ | $10.7 \%$ | $11.7 \%$ |
| 2100 | $10.1 \%$ | $10.5 \%$ | $9.2 \%$ | $13.4 \%$ | $9.4 \%$ | $11.0 \%$ | $13.6 \%$ |
| 2200 | $13.5 \%$ | $6.3 \%$ | $4.9 \%$ | $6.4 \%$ | $4.8 \%$ | $5.4 \%$ | $6.5 \%$ |
| 2300 | $14.7 \%$ | $7.7 \%$ | $5.3 \%$ | $7.5 \%$ | $6.2 \%$ | $5.7 \%$ | $7.1 \%$ |
|  |  |  |  |  |  |  | $6.8 \%$ |

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### 13.6.3 Eastern District

Table Eastern A: Most Frequent Calls for Service
District Dispatched Calls for Service: ${ }^{316} 101,447$
Number of Dispatched Calls in the Most Frequent Calls for Service List: 81,541
Percentage of Dispatched Calls that are in the Most Frequent Calls for Service List: 80 percent

| Dispatched Call Type | Number |
| :---: | :---: |
| 89-911/NO VOICE CALL | 12378 |
| 55 - DISORDERLY PERSON | 11895 |
| 4E - COMMON ASSAULT | 9146 |
| 79-OTHER | 7667 |
| 870 - NARCOTICS - OUTSIDE | 5745 |
| 49 - FAMILY DISTURBANCE | 4464 |
| 5G - BURGLARY | 4370 |
| 54 - ARMED PERSON | 3815 |
| 30 - ACCIDENT-AUTO | 3364 |
| 65 - SILENT ALARM | 3157 |
| 6 J - LARCENY- OTHER | 2144 |
| 4D - AGG ASSAULT - HANDS | 1944 |
| 61 - PERSON WANTED ON WAR | 1874 |
| 75 - DESTRUCT. OF PROPERTY | 1645 |
| 99 - ACCIDENT-HIT \& RUN | 1606 |
| 31 - ACCIDENT-PERSON INJ. | 1460 |
| 6D - LARCENY- FROM AUTO | 1337 |
| 85-BEHAVIORAL CRISIS | 1199 |
| 57 - SUSPICIOUS PERSON | 1190 |
| 4A - AGG ASSAULT - GUN | 1141 |

Table Eastern B: Most Frequent Self-Initiated Activities
District Records Labeled Self-Initiated: ${ }^{317}$ 8,219
Number of Activities in the Most Frequent Self-Initiated Activities List: 7,456
Percentage of Dispatched Calls that are in the Most Frequent Calls for Service List: 91 percent

| Dispatched Call Type | Number |
| :--- | ---: |
| 20D - DETAIL | 2567 |

[^80]| FI - FIELD INTERVIEW | 1781 |
| :---: | :---: |
| 25 - CAR STOP | 1078 |
| 61 - PERSON WANTED ON WAR | 304 |
| 79-OTHER | 282 |
| 30 - ACCIDENT-AUTO | 188 |
| 20F - WARRANT | 182 |
| T-TRAFFIC STOP | 117 |
| 24 - TOWED VEHICLE | 102 |
| 60 - SICK PERSON | 101 |
| 31 - ACCIDENT-PERSON INJ. | 93 |
| 4E - COMMON ASSAULT | 93 |
| 20J - TRANSPORT | 92 |
| 20A - FOLLOWUP | 88 |
| 20Z-OTHER | 86 |
| 87V - NARCOTICS-ONVIEW | 78 |
| 4A - AGG ASSAULT - GUN | 76 |
| 20B - FOOT PATROL | 52 |
| 4B - AGG ASSAULT - CUT | 49 |
| 99 - ACCIDENT-HIT \& RUN | 47 |

Table Eastern C: Calls for Service Time in Hours

| Hour | Sun | Mon | lue | Wed | lhu | Sat |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 0000 | 7.9 | 8.9 | 9.6 | 9.1 | 8.9 | 10.6 | 9.0 |
| 0100 | 10.9 | 7.3 | 8.4 | 7.9 | 8.1 | 8.7 | 8.4 |
| 0200 | 8.7 | 5.6 | 6.1 | 5.6 | 6.2 | 6.6 | 8.5 |
| 0300 | 6.7 | 5.2 | 5.4 | 5.5 | 5.5 | 5.6 | 6.9 |
| 0400 | 5.7 | 4.6 | 4.9 | 4.8 | 4.3 | 5.0 | 6.0 |
| 0500 | 5.2 | 4.5 | 4.1 | 4.3 | 3.5 | 4.2 | 5.6 |
| 0600 | 5.0 | 4.3 | 4.8 | 4.3 | 3.9 | 4.4 | 5.5 |
| 0700 | 4.4 | 5.0 | 5.5 | 5.4 | 4.2 | 5.9 | 5.4 |
| 0800 | 5.0 | 6.2 | 6.9 | 6.5 | 5.7 | 6.5 | 5.6 |
| 0900 | 6.2 | 7.4 | 8.0 | 7.4 | 7.6 | 7.1 | 6.4 |
| 1000 | 7.2 | 8.0 | 8.1 | 7.6 | 8.1 | 8.0 | 6.8 |
| 1100 | 7.5 | 8.5 | 8.4 | 8.4 | 8.5 | 8.4 | 6.4 |
| 1200 | 8.1 | 9.1 | 9.4 | 8.9 | 9.1 | 8.9 | 6.9 |
| 1300 | 8.6 | 8.8 | 8.9 | 8.6 | 9.5 | 8.7 | 6.8 |
| 1400 | 8.0 | 8.7 | 8.6 | 8.0 | 9.9 | 8.5 | 7.5 |
| 1500 | 8.5 | 8.9 | 8.5 | 8.7 | 10.1 | 8.9 | 7.9 |
| 1600 | 7.0 | 8.3 | 8.4 | 9.1 | 8.8 | 9.3 | 8.1 |
| 1700 | 8.1 | 9.7 | 9.8 | 9.9 | 10.4 | 9.2 | 7.3 |
| 1800 | 8.1 | 9.4 | 9.2 | 9.3 | 9.6 | 10.0 | 8.3 |
| 1900 | 8.0 | 9.6 | 8.2 | 8.5 | 9.6 | 9.6 | 7.6 |
| 2000 | 8.2 | 9.3 | 8.0 | 8.0 | 9.3 | 8.5 | 7.6 |
| 2100 | 8.0 | 8.5 | 8.0 | 8.1 | 9.1 | 8.3 | 7.6 |

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| 2200 | 8.1 | 8.5 | 8.4 | 8.3 | 9.2 | 8.7 | 8.3 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 2300 | 9.1 | 9.6 | 10.6 | 8.7 | 10.0 | 9.6 | 9.9 |
|  |  |  |  |  |  |  | 1280.2 |

Table Eastern D: Staffing Weekly Hours

| Hour | Sun | Mon | Tue | Wed | Fri | Sat |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 0000 | 24 | 24 | 28 | 26 | 26 | 30 | 30 |
| 0100 | 24 | 24 | 28 | 26 | 26 | 30 | 30 |
| 0200 | 24 | 12 | 14 | 13 | 12 | 15 | 30 |
| 0300 | 12 | 12 | 14 | 13 | 12 | 15 | 15 |
| 0400 | 12 | 12 | 14 | 13 | 12 | 15 | 15 |
| 0500 | 12 | 12 | 14 | 13 | 12 | 15 | 15 |
| 0600 | 12 | 12 | 14 | 13 | 12 | 15 | 15 |
| 0700 | 24 | 24 | 28 | 26 | 25 | 28 | 28 |
| 0800 | 12 | 12 | 14 | 13 | 13 | 13 | 13 |
| 0900 | 12 | 12 | 14 | 13 | 13 | 13 | 13 |
| 1000 | 12 | 12 | 14 | 13 | 13 | 13 | 13 |
| 1100 | 12 | 12 | 14 | 13 | 13 | 13 | 13 |
| 1200 | 12 | 12 | 14 | 13 | 13 | 13 | 13 |
| 1300 | 12 | 12 | 14 | 13 | 13 | 13 | 13 |
| 1400 | 12 | 12 | 14 | 13 | 13 | 13 | 13 |
| 1500 | 12 | 12 | 14 | 13 | 13 | 13 | 13 |
| 1600 | 25 | 25 | 28 | 27 | 28 | 13 | 13 |
| 1700 | 13 | 13 | 14 | 14 | 15 | 15 | 12 |
| 1800 | 13 | 13 | 14 | 14 | 15 | 15 | 12 |
| 1900 | 13 | 13 | 14 | 14 | 15 | 15 | 12 |
| 2000 | 13 | 13 | 14 | 14 | 15 | 15 | 12 |
| 2100 | 12 | 13 | 14 | 14 | 15 | 15 | 12 |
| 2200 | 24 | 27 | 28 | 26 | 30 | 30 | 24 |
| 2300 | 24 | 27 | 28 | 26 | 30 | 30 | 24 |
|  |  |  |  |  |  |  | 2787.0 |

Table Eastern E: Average Patrol Time Consumed by Calls for Service

| Hour | Sun | Mon | Tue | Wed | Thu | Fri | Sat |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 0000 | $33.0 \%$ | $36.9 \%$ | $34.3 \%$ | $35.1 \%$ | $34.2 \%$ | $35.4 \%$ | $29.8 \%$ |
| 0100 | $45.6 \%$ | $30.3 \%$ | $30.1 \%$ | $30.3 \%$ | $31.2 \%$ | $29.1 \%$ | $28.1 \%$ |
| 0200 | $36.3 \%$ | $46.8 \%$ | $43.5 \%$ | $42.7 \%$ | $51.5 \%$ | $44.0 \%$ | $28.3 \%$ |
| 0300 | $55.7 \%$ | $42.9 \%$ | $38.3 \%$ | $42.6 \%$ | $45.4 \%$ | $37.4 \%$ | $45.8 \%$ |
| 0400 | $47.2 \%$ | $38.5 \%$ | $35.1 \%$ | $37.2 \%$ | $35.4 \%$ | $33.0 \%$ | $40.2 \%$ |
| 0500 | $43.2 \%$ | $37.4 \%$ | $29.5 \%$ | $33.2 \%$ | $28.9 \%$ | $28.1 \%$ | $37.3 \%$ |
| 0600 | $41.8 \%$ | $35.7 \%$ | $34.5 \%$ | $32.8 \%$ | $32.4 \%$ | $29.1 \%$ | $36.9 \%$ |
| 0700 | $18.1 \%$ | $20.8 \%$ | $19.6 \%$ | $20.6 \%$ | $16.6 \%$ | $20.9 \%$ | $19.3 \%$ |
| 0800 | $41.5 \%$ | $51.4 \%$ | $48.9 \%$ | $49.9 \%$ | $43.5 \%$ | $49.7 \%$ | $43.1 \%$ |
| 0900 | $51.4 \%$ | $61.4 \%$ | $57.0 \%$ | $57.2 \%$ | $58.2 \%$ | $54.6 \%$ | $49.1 \%$ |
| 1000 | $60.3 \%$ | $66.3 \%$ | $58.0 \%$ | $58.2 \%$ | $62.3 \%$ | $61.3 \%$ | $52.3 \%$ |

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| 1100 | $62.5 \%$ | $70.4 \%$ | $59.6 \%$ | $64.4 \%$ | $65.4 \%$ | $64.7 \%$ | $49.1 \%$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 1200 | $67.4 \%$ | $75.7 \%$ | $67.4 \%$ | $68.7 \%$ | $69.9 \%$ | $68.3 \%$ | $52.7 \%$ |
| 1300 | $71.7 \%$ | $73.2 \%$ | $63.7 \%$ | $66.0 \%$ | $72.9 \%$ | $67.2 \%$ | $52.3 \%$ |
| 1400 | $66.8 \%$ | $72.5 \%$ | $61.1 \%$ | $61.2 \%$ | $76.2 \%$ | $65.1 \%$ | $57.8 \%$ |
| 1500 | $71.0 \%$ | $74.3 \%$ | $60.5 \%$ | $66.9 \%$ | $77.7 \%$ | $68.6 \%$ | $60.9 \%$ |
| 1600 | $28.1 \%$ | $33.1 \%$ | $30.1 \%$ | $33.6 \%$ | $31.3 \%$ | $71.7 \%$ | $62.2 \%$ |
| 1700 | $62.2 \%$ | $74.7 \%$ | $69.6 \%$ | $70.8 \%$ | $69.2 \%$ | $61.0 \%$ | $60.7 \%$ |
| 1800 | $62.6 \%$ | $72.4 \%$ | $65.4 \%$ | $66.4 \%$ | $64.1 \%$ | $66.6 \%$ | $68.8 \%$ |
| 1900 | $61.3 \%$ | $73.5 \%$ | $58.7 \%$ | $60.4 \%$ | $63.8 \%$ | $64.1 \%$ | $63.3 \%$ |
| 2000 | $63.3 \%$ | $71.2 \%$ | $56.9 \%$ | $56.8 \%$ | $62.0 \%$ | $56.6 \%$ | $63.2 \%$ |
| 2100 | $66.5 \%$ | $65.3 \%$ | $57.1 \%$ | $57.7 \%$ | $60.4 \%$ | $55.3 \%$ | $63.5 \%$ |
| 2200 | $33.7 \%$ | $31.4 \%$ | $30.0 \%$ | $31.9 \%$ | $30.5 \%$ | $29.1 \%$ | $34.6 \%$ |
| 2300 | $37.7 \%$ | $35.5 \%$ | $37.8 \%$ | $33.6 \%$ | $33.4 \%$ | $32.1 \%$ | $41.4 \%$ |
|  |  |  |  |  |  |  | $50.0 \%$ |

Table Eastern F: Average Patrol Time Consumed by Self-Initiated Activities

| Hour | Sun | Mon | Tue | Wed | lhu | lri | Sat |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 0000 | $9.9 \%$ | $10.5 \%$ | $8.8 \%$ | $10.1 \%$ | $10.4 \%$ | $9.6 \%$ | $9.6 \%$ |
| 0100 | $8.7 \%$ | $7.9 \%$ | $7.6 \%$ | $8.6 \%$ | $8.7 \%$ | $8.9 \%$ | $10.6 \%$ |
| 0200 | $7.8 \%$ | $10.3 \%$ | $10.1 \%$ | $11.4 \%$ | $13.8 \%$ | $12.1 \%$ | $10.2 \%$ |
| 0300 | $11.4 \%$ | $9.0 \%$ | $9.5 \%$ | $10.9 \%$ | $10.0 \%$ | $9.1 \%$ | $12.1 \%$ |
| 0400 | $7.9 \%$ | $8.8 \%$ | $7.9 \%$ | $10.0 \%$ | $9.0 \%$ | $7.1 \%$ | $11.6 \%$ |
| 0500 | $4.9 \%$ | $7.1 \%$ | $6.2 \%$ | $8.6 \%$ | $7.9 \%$ | $6.1 \%$ | $10.1 \%$ |
| 0600 | $4.7 \%$ | $5.3 \%$ | $5.4 \%$ | $7.3 \%$ | $4.6 \%$ | $5.4 \%$ | $7.6 \%$ |
| 0700 | $2.0 \%$ | $3.0 \%$ | $2.6 \%$ | $4.0 \%$ | $2.4 \%$ | $3.2 \%$ | $3.9 \%$ |
| 0800 | $3.5 \%$ | $6.7 \%$ | $5.1 \%$ | $9.5 \%$ | $7.2 \%$ | $6.8 \%$ | $8.3 \%$ |
| 0900 | $5.0 \%$ | $7.9 \%$ | $8.3 \%$ | $9.7 \%$ | $10.0 \%$ | $9.6 \%$ | $10.5 \%$ |
| 1000 | $6.8 \%$ | $10.4 \%$ | $10.5 \%$ | $10.4 \%$ | $12.8 \%$ | $14.5 \%$ | $12.8 \%$ |
| 1100 | $11.5 \%$ | $13.3 \%$ | $13.6 \%$ | $13.2 \%$ | $15.0 \%$ | $14.0 \%$ | $14.5 \%$ |
| 1200 | $13.2 \%$ | $17.6 \%$ | $15.2 \%$ | $12.6 \%$ | $18.6 \%$ | $13.3 \%$ | $13.7 \%$ |
| 1300 | $10.3 \%$ | $16.9 \%$ | $11.9 \%$ | $11.3 \%$ | $19.1 \%$ | $14.5 \%$ | $13.5 \%$ |
| 1400 | $9.0 \%$ | $13.9 \%$ | $11.9 \%$ | $11.4 \%$ | $16.7 \%$ | $12.4 \%$ | $12.8 \%$ |
| 1500 | $8.2 \%$ | $13.6 \%$ | $13.7 \%$ | $11.3 \%$ | $17.7 \%$ | $11.0 \%$ | $12.3 \%$ |
| 1600 | $3.7 \%$ | $5.0 \%$ | $6.4 \%$ | $5.7 \%$ | $6.8 \%$ | $12.2 \%$ | $11.9 \%$ |
| 1700 | $9.4 \%$ | $6.8 \%$ | $13.8 \%$ | $12.4 \%$ | $9.6 \%$ | $8.4 \%$ | $12.1 \%$ |
| 1800 | $12.4 \%$ | $6.4 \%$ | $11.9 \%$ | $14.6 \%$ | $14.8 \%$ | $7.8 \%$ | $14.9 \%$ |
| 1900 | $12.8 \%$ | $7.7 \%$ | $11.8 \%$ | $16.1 \%$ | $13.1 \%$ | $9.2 \%$ | $16.9 \%$ |
| 2000 | $16.3 \%$ | $9.9 \%$ | $13.6 \%$ | $15.6 \%$ | $12.2 \%$ | $11.8 \%$ | $16.4 \%$ |
| 2100 | $15.4 \%$ | $8.5 \%$ | $13.0 \%$ | $17.0 \%$ | $14.2 \%$ | $11.8 \%$ | $16.1 \%$ |
| 2200 | $7.2 \%$ | $4.4 \%$ | $7.0 \%$ | $8.5 \%$ | $7.3 \%$ | $6.7 \%$ | $8.5 \%$ |
| 2300 | $9.2 \%$ | $6.9 \%$ | $8.6 \%$ | $8.6 \%$ | $8.4 \%$ | $7.6 \%$ | $9.5 \%$ |
|  |  |  |  |  |  |  | $10.2 \%$ |

### 13.6.4 Northeastern District

## Table Northeastern A: Most Frequent Calls for Service

District Dispatched Calls for Service: ${ }^{318} 157,117$
Number of Dispatched Calls in the Most Frequent Calls for Service List: 125,106
Percentage of Dispatched Calls that are in the Most Frequent Calls for Service List: 80 percent

| Dispatched Call Type | Number |
| :---: | :---: |
| 89-911/NO VOICE CALL | 19282 |
| 55 - DISORDERLY PERSON | 16109 |
| 4E - COMMON ASSAULT | 13984 |
| 79-OTHER | 12640 |
| 65 - SILENT ALARM | 8252 |
| 49 - FAMILY DISTURBANCE | 7514 |
| 5G - BURGLARY | 7209 |
| 30 - ACCIDENT-AUTO | 5990 |
| 57 - SUSPICIOUS PERSON | 3902 |
| 6 J - LARCENY- OTHER | 3628 |
| 54 - ARMED PERSON | 3525 |
| 870 - NARCOTICS - OUTSIDE | 3473 |
| 99 - ACCIDENT-HIT \& RUN | 3336 |
| 75 - DESTRUCT. OF PROPERTY | 3038 |
| 7C - STOLEN VEH./OTHER | 2629 |
| 4D - AGG ASSAULT - HANDS | 2371 |
| 83 - DISCHARGING FIREARM | 2135 |
| 85-BEHAVIORAL CRISIS | 2082 |
| 56 - MISSING PERSON | 2072 |
| 6D - LARCENY- FROM AUTO | 1935 |



Table Northeastern B: Most Frequent Self-Initiated Activities
District Records Labeled Self-Initiated: ${ }^{319} 8,078$
Number of Activities in the Most Frequent Self-Initiated Activities List: 7,324
Percentage of Dispatched Calls that are in the Most Frequent Calls for Service List: 91 percent

| Dispatched Call Type | Number |
| :--- | ---: |
| 20D - DETAIL | 2552 |

[^81]| 25 - CAR STOP | 1342 |
| :---: | :---: |
| FI - FIELD INTERVIEW | 1075 |
| 20F - WARRANT | 478 |
| 79 - OTHER | 327 |
| 61 - PERSON WANTED ON WAR | 266 |
| 30 - ACCIDENT-AUTO | 243 |
| 4E - COMMON ASSAULT | 115 |
| 20Z-OTHER | 103 |
| 81 - RECOVERED PROPERTY | 99 |
| 31 - ACCIDENT-PERSON INJ. | 91 |
| 73 - FALSE PRETENSE | 88 |
| 6 J - LARCENY- OTHER | 87 |
| 20A - FOLLOWUP | 75 |
| 87V - NARCOTICS-ONVIEW | 74 |
| 95 - EXPARTE | 74 |
| 99 - ACCIDENT-HIT \& RUN | 64 |
| 75 - DESTRUCT. OF PROPERTY | 60 |
| 6D - LARCENY- FROM AUTO | 56 |
| 24 - TOWED VEHICLE | 55 |

Table Northeastern C: Calls for Service Time in Hours

| Hour | l | Mon | Tue | Wed | Thu | lri | Sat |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 0000 | 12.4 | 14.6 | 15.5 | 15.8 | 15.1 | 16.4 | 16.1 |
| 0100 | 16.9 | 12.9 | 13.9 | 14.1 | 15.1 | 14.9 | 16.0 |
| 0200 | 15.1 | 9.2 | 10.0 | 10.5 | 10.6 | 10.7 | 16.0 |
| 0300 | 11.2 | 8.6 | 8.3 | 8.8 | 9.2 | 8.7 | 12.0 |
| 0400 | 9.7 | 7.2 | 7.4 | 7.4 | 7.4 | 7.4 | 9.7 |
| 0500 | 8.3 | 6.7 | 6.2 | 6.3 | 6.2 | 6.9 | 8.7 |
| 0600 | 8.1 | 7.0 | 6.7 | 6.2 | 6.5 | 7.2 | 8.6 |
| 0700 | 7.2 | 7.2 | 7.4 | 7.2 | 7.5 | 7.7 | 8.1 |
| 0800 | 6.4 | 8.8 | 9.5 | 9.7 | 9.2 | 9.8 | 7.4 |
| 0900 | 7.8 | 10.6 | 10.3 | 10.6 | 11.0 | 11.0 | 8.7 |
| 1000 | 9.6 | 11.2 | 11.6 | 11.4 | 11.2 | 11.2 | 9.8 |
| 1100 | 10.9 | 11.9 | 12.4 | 12.5 | 12.1 | 12.1 | 11.7 |
| 1200 | 11.2 | 13.1 | 12.6 | 12.2 | 13.0 | 13.4 | 12.3 |
| 1300 | 12.0 | 13.3 | 13.1 | 12.4 | 13.0 | 13.7 | 12.8 |
| 1400 | 12.3 | 12.4 | 11.8 | 12.0 | 12.3 | 12.9 | 13.2 |
| 1500 | 12.8 | 13.4 | 12.6 | 13.1 | 13.5 | 13.3 | 13.4 |
| 1600 | 11.1 | 13.6 | 12.6 | 12.4 | 12.8 | 14.4 | 13.0 |
| 1700 | 13.5 | 15.9 | 15.5 | 14.9 | 15.3 | 13.7 | 11.3 |
| 1800 | 14.4 | 16.9 | 16.0 | 15.9 | 16.4 | 14.8 | 13.3 |
| 1900 | 13.4 | 17.0 | 15.5 | 15.7 | 17.1 | 15.3 | 13.6 |
| 2000 | 14.0 | 16.6 | 15.1 | 15.3 | 16.9 | 14.7 | 14.0 |
| 2100 | 13.7 | 15.7 | 14.9 | 15.3 | 16.6 | 14.6 | 13.4 |


| 2200 | 14.4 | 15.7 | 15.5 | 16.3 | 16.9 | 15.3 | 14.4 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 2300 | 16.0 | 17.1 | 16.1 | 16.2 | 18.0 | 17.6 | 15.3 |
|  |  |  |  |  |  |  | 2063.883 |

Table Northeastern D: Staffing Weekly Hours

| Hour | Sun | Mon | Tue | Thu | Fri |  |  |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| 0000 | 36 | 26 | 30 | 39 | 31 | 36 | 35 |
| 0100 | 36 | 26 | 30 | 39 | 31 | 36 | 35 |
| 0200 | 36 | 13 | 16 | 16 | 16 | 15 | 35 |
| 0300 | 12 | 10 | 16 | 16 | 16 | 15 | 17 |
| 0400 | 12 | 10 | 16 | 16 | 16 | 15 | 17 |
| 0500 | 12 | 10 | 16 | 16 | 16 | 15 | 17 |
| 0600 | 12 | 10 | 16 | 16 | 16 | 15 | 17 |
| 0700 | 32 | 26 | 36 | 40 | 37 | 35 | 36 |
| 0800 | 20 | 16 | 20 | 24 | 21 | 20 | 19 |
| 0900 | 20 | 16 | 20 | 24 | 21 | 20 | 19 |
| 1000 | 20 | 16 | 20 | 24 | 21 | 20 | 19 |
| 1100 | 20 | 16 | 20 | 24 | 21 | 20 | 19 |
| 1200 | 16 | 12 | 20 | 17 | 21 | 20 | 13 |
| 1300 | 16 | 12 | 20 | 17 | 21 | 20 | 13 |
| 1400 | 16 | 12 | 20 | 17 | 21 | 20 | 13 |
| 1500 | 16 | 12 | 20 | 17 | 21 | 20 | 13 |
| 1600 | 26 | 30 | 43 | 36 | 43 | 20 | 13 |
| 1700 | 20 | 25 | 23 | 19 | 22 | 18 | 21 |
| 1800 | 20 | 25 | 23 | 19 | 22 | 18 | 21 |
| 1900 | 20 | 25 | 23 | 19 | 22 | 18 | 21 |
| 2000 | 20 | 25 | 23 | 19 | 22 | 18 | 21 |
| 2100 | 13 | 14 | 23 | 15 | 21 | 18 | 21 |
| 2200 | 26 | 30 | 39 | 31 | 36 | 35 | 36 |
| 2300 | 26 | 30 | 39 | 31 | 36 | 35 | 36 |
|  |  |  |  |  |  |  | 3693 |

Table Northeastern E: Average Patrol Time Consumed by Calls for Service

| Hour | Sun | Mon | Tue | Wed | Thu | Fri | Sat |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 0000 | $34.4 \%$ | $56.0 \%$ | $51.6 \%$ | $40.6 \%$ | $48.7 \%$ | $45.6 \%$ | $46.1 \%$ |
| 0100 | $46.9 \%$ | $49.6 \%$ | $46.3 \%$ | $36.1 \%$ | $48.7 \%$ | $41.3 \%$ | $45.8 \%$ |
| 0200 | $41.8 \%$ | $70.6 \%$ | $62.4 \%$ | $65.6 \%$ | $66.5 \%$ | $71.4 \%$ | $45.7 \%$ |
| 0300 | $93.2 \%$ | $85.8 \%$ | $51.9 \%$ | $55.2 \%$ | $57.6 \%$ | $57.8 \%$ | $70.7 \%$ |
| 0400 | $80.7 \%$ | $72.2 \%$ | $46.5 \%$ | $46.3 \%$ | $45.9 \%$ | $49.0 \%$ | $56.9 \%$ |
| 0500 | $69.0 \%$ | $67.2 \%$ | $38.5 \%$ | $39.6 \%$ | $38.8 \%$ | $46.0 \%$ | $51.1 \%$ |
| 0600 | $67.6 \%$ | $69.5 \%$ | $42.1 \%$ | $39.0 \%$ | $40.6 \%$ | $47.8 \%$ | $50.3 \%$ |
| 0700 | $22.6 \%$ | $27.7 \%$ | $20.4 \%$ | $18.1 \%$ | $20.2 \%$ | $21.9 \%$ | $22.6 \%$ |
| 0800 | $31.8 \%$ | $55.2 \%$ | $47.6 \%$ | $40.4 \%$ | $44.0 \%$ | $49.2 \%$ | $38.7 \%$ |
| 0900 | $38.8 \%$ | $66.3 \%$ | $51.7 \%$ | $44.2 \%$ | $52.1 \%$ | $54.9 \%$ | $45.9 \%$ |
| 1000 | $48.2 \%$ | $70.1 \%$ | $58.1 \%$ | $47.3 \%$ | $53.3 \%$ | $55.8 \%$ | $51.3 \%$ |

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| 1100 | $54.6 \%$ | $74.5 \%$ | $62.1 \%$ | $51.9 \%$ | $57.6 \%$ | $60.6 \%$ | $61.3 \%$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 1200 | $69.9 \%$ | $109.0 \%$ | $63.2 \%$ | $71.6 \%$ | $62.0 \%$ | $66.9 \%$ | $94.4 \%$ |
| 1300 | $75.1 \%$ | $111.1 \%$ | $65.6 \%$ | $72.6 \%$ | $61.7 \%$ | $68.3 \%$ | $98.3 \%$ |
| 1400 | $77.0 \%$ | $103.6 \%$ | $58.9 \%$ | $70.6 \%$ | $58.6 \%$ | $64.4 \%$ | $101.4 \%$ |
| 1500 | $80.1 \%$ | $111.9 \%$ | $63.1 \%$ | $76.9 \%$ | $64.4 \%$ | $66.7 \%$ | $103.3 \%$ |
| 1600 | $42.6 \%$ | $45.3 \%$ | $29.4 \%$ | $34.3 \%$ | $29.8 \%$ | $71.8 \%$ | $100.3 \%$ |
| 1700 | $67.3 \%$ | $63.5 \%$ | $67.5 \%$ | $78.2 \%$ | $69.3 \%$ | $76.3 \%$ | $53.7 \%$ |
| 1800 | $71.8 \%$ | $67.5 \%$ | $69.3 \%$ | $83.7 \%$ | $74.7 \%$ | $82.3 \%$ | $63.5 \%$ |
| 1900 | $66.8 \%$ | $68.1 \%$ | $67.2 \%$ | $82.5 \%$ | $77.5 \%$ | $84.7 \%$ | $64.6 \%$ |
| 2000 | $69.8 \%$ | $66.2 \%$ | $65.6 \%$ | $80.5 \%$ | $76.7 \%$ | $81.8 \%$ | $66.6 \%$ |
| 2100 | $105.4 \%$ | $112.0 \%$ | $64.9 \%$ | $101.9 \%$ | $79.0 \%$ | $81.1 \%$ | $63.6 \%$ |
| 2200 | $55.4 \%$ | $52.4 \%$ | $39.6 \%$ | $52.7 \%$ | $47.0 \%$ | $43.6 \%$ | $40.1 \%$ |
| 2300 | $61.3 \%$ | $57.1 \%$ | $41.2 \%$ | $52.1 \%$ | $50.0 \%$ | $50.2 \%$ | $42.5 \%$ |
|  |  |  |  |  |  |  | $60.1 \%$ |

Table Northeastern F: Average Patrol Time Consumed by Self-Initiated Activities

| Hour | Sun | Mon | Tue | Wed | Thu | Fri | Sat |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 0000 | $6.3 \%$ | $8.1 \%$ | $5.7 \%$ | $6.2 \%$ | $7.7 \%$ | $5.7 \%$ | $7.7 \%$ |
| 0100 | $9.5 \%$ | $7.8 \%$ | $5.9 \%$ | $6.1 \%$ | $6.7 \%$ | $7.5 \%$ | $8.9 \%$ |
| 0200 | $8.4 \%$ | $10.3 \%$ | $9.6 \%$ | $10.4 \%$ | $10.1 \%$ | $14.2 \%$ | $8.0 \%$ |
| 0300 | $15.3 \%$ | $9.8 \%$ | $6.8 \%$ | $8.8 \%$ | $8.9 \%$ | $9.2 \%$ | $9.7 \%$ |
| 0400 | $14.3 \%$ | $7.8 \%$ | $5.9 \%$ | $6.0 \%$ | $5.6 \%$ | $6.0 \%$ | $8.4 \%$ |
| 0500 | $10.7 \%$ | $5.8 \%$ | $6.4 \%$ | $7.0 \%$ | $4.3 \%$ | $4.9 \%$ | $9.4 \%$ |
| 0600 | $8.2 \%$ | $4.3 \%$ | $5.0 \%$ | $6.3 \%$ | $4.3 \%$ | $4.1 \%$ | $6.9 \%$ |
| 0700 | $2.8 \%$ | $1.4 \%$ | $1.7 \%$ | $2.3 \%$ | $1.7 \%$ | $1.3 \%$ | $2.5 \%$ |
| 0800 | $4.2 \%$ | $2.9 \%$ | $3.8 \%$ | $3.4 \%$ | $2.8 \%$ | $2.7 \%$ | $2.8 \%$ |
| 0900 | $5.8 \%$ | $4.1 \%$ | $5.8 \%$ | $5.1 \%$ | $4.7 \%$ | $3.9 \%$ | $3.9 \%$ |
| 1000 | $6.7 \%$ | $6.4 \%$ | $7.3 \%$ | $6.4 \%$ | $7.1 \%$ | $4.1 \%$ | $6.6 \%$ |
| 1100 | $6.9 \%$ | $6.7 \%$ | $8.6 \%$ | $6.6 \%$ | $8.0 \%$ | $5.8 \%$ | $5.9 \%$ |
| 1200 | $8.2 \%$ | $9.3 \%$ | $9.0 \%$ | $10.5 \%$ | $8.3 \%$ | $7.2 \%$ | $10.1 \%$ |
| 1300 | $9.3 \%$ | $10.8 \%$ | $10.1 \%$ | $10.7 \%$ | $8.3 \%$ | $7.7 \%$ | $10.1 \%$ |
| 1400 | $8.6 \%$ | $10.8 \%$ | $9.9 \%$ | $9.2 \%$ | $9.4 \%$ | $7.3 \%$ | $9.5 \%$ |
| 1500 | $7.3 \%$ | $9.6 \%$ | $10.5 \%$ | $7.5 \%$ | $10.2 \%$ | $8.0 \%$ | $7.4 \%$ |
| 1600 | $3.1 \%$ | $3.9 \%$ | $4.5 \%$ | $3.6 \%$ | $4.0 \%$ | $8.2 \%$ | $6.5 \%$ |
| 1700 | $5.3 \%$ | $5.7 \%$ | $8.3 \%$ | $6.1 \%$ | $8.1 \%$ | $7.4 \%$ | $3.7 \%$ |
| 1800 | $6.1 \%$ | $5.8 \%$ | $9.8 \%$ | $6.7 \%$ | $7.0 \%$ | $7.9 \%$ | $5.6 \%$ |
| 1900 | $6.7 \%$ | $5.0 \%$ | $10.1 \%$ | $7.9 \%$ | $6.7 \%$ | $11.1 \%$ | $6.7 \%$ |
| 2000 | $6.8 \%$ | $4.5 \%$ | $9.2 \%$ | $7.9 \%$ | $7.3 \%$ | $10.7 \%$ | $5.8 \%$ |
| 2100 | $9.5 \%$ | $7.9 \%$ | $7.6 \%$ | $9.4 \%$ | $6.0 \%$ | $11.6 \%$ | $6.4 \%$ |
| 2200 | $5.4 \%$ | $3.9 \%$ | $5.0 \%$ | $5.3 \%$ | $3.7 \%$ | $6.0 \%$ | $3.8 \%$ |
| 2300 | $7.8 \%$ | $5.2 \%$ | $5.5 \%$ | $6.9 \%$ | $5.0 \%$ | $7.3 \%$ | $5.0 \%$ |
|  |  |  |  |  |  |  | $6.9 \%$ |

### 13.6.5 Northern District

## Table Northern A: Most Frequent Calls for Service

District Dispatched Calls for Service: ${ }^{320} 115,160$
Number of Dispatched Calls in the Most Frequent Calls for Service List: 90,711
Percentage of Dispatched Calls that are in the Most Frequent Calls for Service List: 79 percent

| Dispatched Call Type | Number |
| :---: | :---: |
| 55 - DISORDERLY PERSON | 14137 |
| 89-911/NO VOICE CALL | 10325 |
| 79 - OTHER | 9627 |
| 4E - COMMON ASSAULT | 8975 |
| 65 - SILENT ALARM | 7255 |
| 30 - ACCIDENT-AUTO | 5777 |
| 5G - BURGLARY | 5181 |
| 49 - FAMILY DISTURBANCE | 3926 |
| 57 - SUSPICIOUS PERSON | 3644 |
| 6 J - LARCENY- OTHER | 3183 |
| 870 - NARCOTICS - OUTSIDE | 2979 |
| 54 - ARMED PERSON | 2170 |
| 99 - ACCIDENT-HIT \& RUN | 2168 |
| 75 - DESTRUCT. OF PROPERTY | 1928 |
| 6D - LARCENY- FROM AUTO | 1785 |
| 4D - AGG ASSAULT - HANDS | 1698 |
| 31 - ACCIDENT-PERSON INJ. | 1690 |
| 85-BEHAVIORAL CRISIS | 1490 |
| 61 - PERSON WANTED ON |  |
| WAR | 1411 |
| 7C - STOLEN VEH./OTHER | 1362 |

Table Northern B: Most Frequent Self-Initiated Activities
District Records Labeled Self-Initiated: ${ }^{321} 4,790$
Number of Activities in the Most Frequent Self-Initiated Activities List: 4,154
Percentage of Dispatched Calls that are in the Most Frequent Calls for Service List: 87 percent

\section*{| Dispatched Call Type | Number |
| :--- | :--- |}

[^82]| 20D - DETAIL | 1563 |
| :--- | ---: |
| 25 - CAR STOP | 540 |
| FI - FIELD INTERVIEW | 412 |
| 30 - ACCIDENT-AUTO | 328 |
| 79 - OTHER | 273 |
| 61 - PERSON WANTED ON |  |
| WAR | 111 |
| $4 E-$ COMMON ASSAULT | 97 |
| $20 F$ - WARRANT | 96 |
| 60 - SICK PERSON | 87 |
| 55 - DISORDERLY PERSON | 81 |
| 6 - LARCENY- OTHER | 70 |
| 81 - RECOVERED PROPERTY | 64 |
| $24-$ TOWED VEHICLE | 63 |
| 73 - FALSE PRETENSE | 63 |
| $20 Z$ - OTHER | 60 |
| $6 D ~-~ L A R C E N Y-~ F R O M ~ A U T O ~$ | 59 |
| $20 A ~-~ F O L L O W U P ~$ | 54 |
| $99-$ ACCIDENT-HIT \& RUN | 47 |
| 34 - ACCIDENT-DEPT. | 45 |
| 75 - DESTRUCT. OF |  |
| PROPERTY | 41 |

## Table Northern C: Calls for Service Time in Hours

| Hour | Sun | Mon | Tue | Wed | Thu | Sri |  |
| :--- | ---: | :--- | ---: | ---: | ---: | ---: | ---: |
| 0000 | 8.7 | 11.0 | 10.4 | 10.9 | 10.1 | 12.3 | 13.7 |
| 0100 | 12.0 | 8.6 | 8.0 | 9.1 | 8.7 | 10.0 | 12.6 |
| 0200 | 9.0 | 5.9 | 6.2 | 6.9 | 6.6 | 7.2 | 10.1 |
| 0300 | 6.9 | 5.0 | 5.4 | 5.4 | 5.6 | 6.3 | 8.1 |
| 0400 | 6.1 | 4.8 | 4.3 | 4.7 | 5.1 | 6.1 | 7.2 |
| 0500 | 5.0 | 4.0 | 3.9 | 4.1 | 5.1 | 5.1 | 5.9 |
| 0600 | 5.2 | 4.1 | 4.9 | 4.5 | 5.0 | 5.4 | 5.8 |
| 0700 | 4.2 | 4.7 | 5.5 | 4.9 | 5.0 | 5.7 | 5.4 |
| 0800 | 4.8 | 6.3 | 7.6 | 7.4 | 7.4 | 7.2 | 6.3 |
| 0900 | 6.0 | 7.8 | 8.4 | 8.4 | 8.8 | 8.2 | 7.4 |
| 1000 | 7.2 | 9.6 | 8.5 | 8.8 | 9.9 | 9.0 | 8.9 |
| 1100 | 7.5 | 10.5 | 9.6 | 9.6 | 10.5 | 9.8 | 10.2 |
| 1200 | 8.6 | 11.4 | 10.4 | 10.4 | 11.5 | 10.7 | 10.8 |
| 1300 | 9.2 | 12.0 | 10.7 | 10.8 | 11.0 | 10.5 | 10.9 |
| 1400 | 9.6 | 11.6 | 10.4 | 10.5 | 11.0 | 11.9 | 11.0 |
| 1500 | 9.7 | 11.9 | 11.1 | 11.2 | 11.9 | 12.0 | 11.3 |
| 1600 | 8.6 | 10.4 | 10.0 | 10.5 | 11.2 | 13.5 | 12.0 |
| 1700 | 10.6 | 12.8 | 13.2 | 12.9 | 13.9 | 11.7 | 9.8 |
| 1800 | 10.8 | 12.3 | 12.6 | 12.2 | 13.3 | 13.8 | 11.6 |


| 1900 | 10.9 | 12.1 | 11.7 | 11.6 | 12.2 | 13.2 | 11.1 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 2000 | 10.6 | 11.9 | 12.2 | 11.2 | 12.0 | 12.5 | 11.1 |
| 2100 | 11.1 | 12.3 | 11.9 | 11.0 | 12.1 | 12.8 | 11.1 |
| 2200 | 10.5 | 11.2 | 11.2 | 10.1 | 12.5 | 12.7 | 10.2 |
| 2300 | 11.0 | 11.5 | 12.1 | 10.4 | 13.1 | 13.6 | 11.3 |
|  |  |  |  |  |  |  | 1572.117 |

Table Northern D: Staffing Weekly Hours

| Hour | Sun | Mon | Tue | Wed | Thu | Fri | Sat |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 0000 | 22 | 16 | 23 | 26 | 24 | 29 | 27 |
| 0100 | 22 | 16 | 23 | 26 | 24 | 29 | 27 |
| 0200 | 22 | 10 | 13 | 11 | 12 | 15 | 27 |
| 0300 | 11 | 10 | 13 | 11 | 12 | 15 | 13 |
| 0400 | 11 | 10 | 13 | 11 | 12 | 15 | 13 |
| 0500 | 11 | 10 | 13 | 11 | 12 | 15 | 13 |
| 0600 | 11 | 10 | 13 | 11 | 12 | 15 | 13 |
| 0700 | 26 | 24 | 24 | 26 | 28 | 36 | 24 |
| 0800 | 15 | 14 | 11 | 15 | 16 | 21 | 11 |
| 0900 | 15 | 14 | 11 | 15 | 16 | 21 | 11 |
| 1000 | 15 | 14 | 11 | 15 | 16 | 21 | 11 |
| 1100 | 15 | 14 | 11 | 15 | 16 | 21 | 11 |
| 1200 | 13 | 13 | 11 | 15 | 14 | 21 | 9 |
| 1300 | 13 | 13 | 11 | 15 | 14 | 21 | 9 |
| 1400 | 13 | 13 | 11 | 15 | 14 | 21 | 9 |
| 1500 | 13 | 13 | 11 | 15 | 14 | 21 | 9 |
| 1600 | 26 | 27 | 31 | 29 | 28 | 21 | 9 |
| 1700 | 13 | 14 | 20 | 14 | 14 | 17 | 16 |
| 1800 | 13 | 14 | 20 | 14 | 14 | 17 | 16 |
| 1900 | 13 | 14 | 20 | 14 | 14 | 17 | 16 |
| 2000 | 13 | 14 | 20 | 14 | 14 | 17 | 16 |
| 2100 | 6 | 10 | 15 | 12 | 14 | 17 | 16 |
| 2200 | 16 | 23 | 26 | 24 | 29 | 27 | 24 |
| 2300 | 16 | 23 | 26 | 24 | 15 | 13 | 24 |
|  |  |  |  |  |  |  | 2771 |

Table Northern E: Average Patrol Time Consumed by Calls for Service

| Hour | Sun | Mon | Tue | Wed | Thu | lri | Sat |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 0000 | $39.5 \%$ | $68.9 \%$ | $45.1 \%$ | $41.9 \%$ | $42.2 \%$ | $42.4 \%$ | $50.9 \%$ |
| 0100 | $54.6 \%$ | $54.0 \%$ | $34.9 \%$ | $34.9 \%$ | $36.3 \%$ | $34.4 \%$ | $46.5 \%$ |
| 0200 | $41.1 \%$ | $58.7 \%$ | $47.8 \%$ | $62.7 \%$ | $55.0 \%$ | $47.8 \%$ | $37.2 \%$ |
| 0300 | $62.3 \%$ | $50.2 \%$ | $41.5 \%$ | $49.2 \%$ | $46.9 \%$ | $41.7 \%$ | $62.1 \%$ |
| 0400 | $55.2 \%$ | $47.7 \%$ | $33.2 \%$ | $42.4 \%$ | $42.5 \%$ | $40.7 \%$ | $55.6 \%$ |
| 0500 | $45.8 \%$ | $39.8 \%$ | $30.1 \%$ | $37.1 \%$ | $42.4 \%$ | $33.7 \%$ | $45.5 \%$ |
| 0600 | $47.0 \%$ | $40.5 \%$ | $37.7 \%$ | $40.5 \%$ | $41.7 \%$ | $36.2 \%$ | $44.5 \%$ |
| 0700 | $16.2 \%$ | $19.4 \%$ | $22.7 \%$ | $18.8 \%$ | $17.8 \%$ | $15.7 \%$ | $22.6 \%$ |

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| 0800 | $32.0 \%$ | $44.6 \%$ | $68.6 \%$ | $49.4 \%$ | $46.1 \%$ | $34.1 \%$ | $56.8 \%$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 0900 | $39.9 \%$ | $55.7 \%$ | $75.9 \%$ | $55.9 \%$ | $55.1 \%$ | $39.0 \%$ | $66.8 \%$ |
| 1000 | $48.2 \%$ | $68.6 \%$ | $77.4 \%$ | $58.8 \%$ | $62.0 \%$ | $42.6 \%$ | $81.2 \%$ |
| 1100 | $50.2 \%$ | $74.8 \%$ | $87.0 \%$ | $63.8 \%$ | $65.3 \%$ | $46.6 \%$ | $92.7 \%$ |
| 1200 | $66.2 \%$ | $87.7 \%$ | $94.2 \%$ | $69.4 \%$ | $82.1 \%$ | $51.0 \%$ | $119.6 \%$ |
| 1300 | $70.6 \%$ | $91.9 \%$ | $97.3 \%$ | $72.2 \%$ | $78.8 \%$ | $50.1 \%$ | $120.7 \%$ |
| 1400 | $74.1 \%$ | $89.2 \%$ | $94.8 \%$ | $70.0 \%$ | $78.8 \%$ | $56.8 \%$ | $122.2 \%$ |
| 1500 | $74.6 \%$ | $91.3 \%$ | $100.8 \%$ | $74.6 \%$ | $85.1 \%$ | $57.0 \%$ | $125.2 \%$ |
| 1600 | $33.2 \%$ | $38.3 \%$ | $32.2 \%$ | $36.0 \%$ | $40.1 \%$ | $64.1 \%$ | $132.8 \%$ |
| 1700 | $81.2 \%$ | $91.5 \%$ | $65.8 \%$ | $91.8 \%$ | $98.9 \%$ | $69.0 \%$ | $61.4 \%$ |
| 1800 | $82.7 \%$ | $87.9 \%$ | $62.8 \%$ | $87.4 \%$ | $94.9 \%$ | $81.4 \%$ | $72.4 \%$ |
| 1900 | $83.8 \%$ | $86.2 \%$ | $58.3 \%$ | $82.5 \%$ | $87.4 \%$ | $77.4 \%$ | $69.2 \%$ |
| 2000 | $81.4 \%$ | $85.1 \%$ | $60.8 \%$ | $79.8 \%$ | $85.5 \%$ | $73.6 \%$ | $69.4 \%$ |
| 2100 | $184.7 \%$ | $123.0 \%$ | $79.2 \%$ | $91.4 \%$ | $86.4 \%$ | $75.1 \%$ | $69.2 \%$ |
| 2200 | $65.8 \%$ | $48.8 \%$ | $43.0 \%$ | $42.0 \%$ | $43.0 \%$ | $47.1 \%$ | $42.6 \%$ |
| 2300 | $69.0 \%$ | $50.1 \%$ | $46.4 \%$ | $43.1 \%$ | $87.2 \%$ | $104.6 \%$ | $47.0 \%$ |
|  |  |  |  |  |  |  | $61.9 \%$ |

Table Northern F: Average Patrol Time Consumed by Self-Initiated Activities

| Hour | Sun | Mon | Tue | Wed | Thu | Fri | Sat |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 0000 | $4.5 \%$ | $7.2 \%$ | $3.6 \%$ | $3.5 \%$ | $4.2 \%$ | $6.1 \%$ | $5.5 \%$ |
| 0100 | $6.1 \%$ | $5.5 \%$ | $3.4 \%$ | $3.1 \%$ | $3.9 \%$ | $6.2 \%$ | $6.2 \%$ |
| 0200 | $4.4 \%$ | $5.0 \%$ | $3.6 \%$ | $4.2 \%$ | $6.1 \%$ | $5.9 \%$ | $5.6 \%$ |
| 0300 | $8.8 \%$ | $5.5 \%$ | $2.9 \%$ | $3.5 \%$ | $2.9 \%$ | $5.0 \%$ | $9.2 \%$ |
| 0400 | $6.7 \%$ | $4.3 \%$ | $2.1 \%$ | $2.7 \%$ | $1.7 \%$ | $4.3 \%$ | $7.6 \%$ |
| 0500 | $5.3 \%$ | $3.2 \%$ | $1.4 \%$ | $2.6 \%$ | $1.5 \%$ | $3.4 \%$ | $5.1 \%$ |
| 0600 | $3.8 \%$ | $2.7 \%$ | $2.6 \%$ | $2.7 \%$ | $2.6 \%$ | $3.3 \%$ | $2.8 \%$ |
| 0700 | $1.0 \%$ | $1.3 \%$ | $1.0 \%$ | $1.2 \%$ | $1.1 \%$ | $1.0 \%$ | $1.1 \%$ |
| 0800 | $2.0 \%$ | $2.4 \%$ | $3.6 \%$ | $2.3 \%$ | $2.5 \%$ | $1.4 \%$ | $2.4 \%$ |
| 0900 | $2.2 \%$ | $2.0 \%$ | $5.8 \%$ | $3.9 \%$ | $3.1 \%$ | $2.5 \%$ | $3.3 \%$ |
| 1000 | $3.3 \%$ | $2.3 \%$ | $7.1 \%$ | $4.6 \%$ | $3.3 \%$ | $3.0 \%$ | $4.7 \%$ |
| 1100 | $3.6 \%$ | $3.2 \%$ | $7.4 \%$ | $4.3 \%$ | $4.1 \%$ | $3.5 \%$ | $6.4 \%$ |
| 1200 | $4.6 \%$ | $4.9 \%$ | $7.4 \%$ | $5.8 \%$ | $5.4 \%$ | $3.3 \%$ | $7.4 \%$ |
| 1300 | $4.4 \%$ | $5.5 \%$ | $7.6 \%$ | $6.7 \%$ | $5.8 \%$ | $3.9 \%$ | $6.7 \%$ |
| 1400 | $4.4 \%$ | $5.9 \%$ | $7.0 \%$ | $6.8 \%$ | $8.0 \%$ | $3.9 \%$ | $8.9 \%$ |
| 1500 | $4.7 \%$ | $7.1 \%$ | $7.7 \%$ | $7.8 \%$ | $9.6 \%$ | $5.6 \%$ | $11.7 \%$ |
| 1600 | $3.0 \%$ | $3.5 \%$ | $1.8 \%$ | $3.4 \%$ | $3.5 \%$ | $5.8 \%$ | $12.0 \%$ |
| 1700 | $8.5 \%$ | $6.3 \%$ | $3.2 \%$ | $5.8 \%$ | $6.9 \%$ | $6.1 \%$ | $6.1 \%$ |
| 1800 | $7.6 \%$ | $6.3 \%$ | $3.3 \%$ | $7.5 \%$ | $7.1 \%$ | $6.3 \%$ | $5.5 \%$ |
| 1900 | $5.9 \%$ | $8.3 \%$ | $4.5 \%$ | $8.0 \%$ | $6.8 \%$ | $7.6 \%$ | $6.7 \%$ |
| 2000 | $7.4 \%$ | $8.1 \%$ | $3.8 \%$ | $10.2 \%$ | $6.7 \%$ | $10.1 \%$ | $7.0 \%$ |
| 2100 | $17.8 \%$ | $11.7 \%$ | $4.9 \%$ | $11.4 \%$ | $7.3 \%$ | $9.1 \%$ | $9.3 \%$ |
| 2200 | $5.5 \%$ | $5.1 \%$ | $2.8 \%$ | $4.4 \%$ | $3.7 \%$ | $5.2 \%$ | $5.9 \%$ |
| 2300 | $5.8 \%$ | $3.8 \%$ | $2.6 \%$ | $3.9 \%$ | $8.2 \%$ | $11.9 \%$ | $5.8 \%$ |
|  |  |  |  |  |  |  | $5.2 \%$ |
|  |  |  |  |  |  |  |  |

### 13.6.6 Northwestern District

## Table Northwestern A: Most Frequent Calls for Service

District Dispatched Calls for Service: ${ }^{322} 108,380$
Number of Dispatched Calls in the Most Frequent Calls for Service List: 87,487
Percentage of Dispatched Calls that are in the Most Frequent Calls for Service List: 81 percent

| Dispatched Call Type | Number |
| :---: | :---: |
| 89-911/NO VOICE CALL | 12878 |
| 55 - DISORDERLY PERSON | 12746 |
| 4E - COMMON ASSAULT | 8802 |
| 79 - OTHER | 7883 |
| 870 - NARCOTICS OUTSIDE | 6435 |
| 65 - SILENT ALARM | 5534 |
| 5G - BURGLARY | 4752 |
| 49 - FAMILY DISTURBANCE | 4264 |
| 30 - ACCIDENT-AUTO | 3898 |
| 6 J - LARCENY- OTHER | 2805 |
| 54 - ARMED PERSON | 2411 |
| 57 - SUSPICIOUS PERSON | 2201 |
| 99 - ACCIDENT-HIT \& RUN | 2169 |
| 75 - DESTRUCT. OF |  |
| PROPERTY | 1838 |
| 7C - STOLEN VEH./OTHER | 1594 |
| 4D - AGG ASSAULT - HANDS | 1580 |
| 6D - LARCENY- FROM AUTO | 1485 |
| 31 - ACCIDENT-PERSON INJ. | 1478 |
| 85-BEHAVIORAL CRISIS | 1391 |
| 56 - MISSING PERSON | 1343 |

Table Northwestern B: Most Frequent Self-Initiated Activities
District Records Labeled Self-Initiated: ${ }^{323} 4,554$
Number of Activities in the Most Frequent Self-Initiated Activities List: 4,035
Percentage of Dispatched Calls that are in the Most Frequent Calls for Service List: 89 percent

[^83]| Dispatched Call Type | Number |
| :---: | :---: |
| 20D - DETAIL | 1501 |
| 25 - CAR STOP | 856 |
| 30 - ACCIDENT-AUTO | 237 |
| FI- FIELD INTERVIEW | 221 |
| 79 - OTHER | 175 |
| 61 - PERSON WANTED ON WAR | 165 |
| 20F - WARRANT | 109 |
| 31 - ACCIDENT-PERSON INJ. | 101 |
| 60 - SICK PERSON | 98 |
| 24 - TOWED VEHICLE | 81 |
| 6 J - LARCENY- OTHER | 70 |
| 4E - COMMON ASSAULT | 61 |
| 6D - LARCENY- FROM AUTO | 53 |
| 83 - DISCHARGING FIREARM | 53 |
| 75 - DESTRUCT. OF PROPERTY | 48 |
| 87V - NARCOTICS-ONVIEW | 46 |
| 81 - RECOVERED PROPERTY | 45 |
| 73 - FALSE PRETENSE | 41 |
| 20J - TRANSPORT | 39 |
| 80 - LOST PROPERTY | 35 |

Table Northwestern C: Calls for Service Time in Hours

| Hour | Sun | Mon | lue | Wed | lhu | Sat |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 0000 | 8.1 | 10.9 | 10.5 | 11.5 | 11.5 | 11.5 | 11.8 |
| 0100 | 11.0 | 9.0 | 9.0 | 9.8 | 10.0 | 9.5 | 11.2 |
| 0200 | 8.6 | 6.1 | 6.2 | 5.9 | 7.0 | 7.2 | 9.0 |
| 0300 | 7.4 | 5.9 | 5.4 | 5.3 | 5.5 | 6.4 | 6.4 |
| 0400 | 6.6 | 5.0 | 4.8 | 4.9 | 4.9 | 5.2 | 6.1 |
| 0500 | 5.8 | 4.3 | 4.0 | 4.5 | 4.8 | 4.5 | 5.5 |
| 0600 | 5.6 | 4.6 | 4.4 | 4.8 | 5.5 | 4.3 | 5.0 |
| 0700 | 4.1 | 4.3 | 4.3 | 4.5 | 5.0 | 4.3 | 4.3 |
| 0800 | 4.3 | 5.9 | 6.3 | 6.1 | 6.8 | 5.4 | 4.8 |
| 0900 | 5.2 | 7.1 | 7.2 | 7.5 | 7.7 | 6.4 | 5.6 |
| 1000 | 6.5 | 8.0 | 8.4 | 8.2 | 8.0 | 7.6 | 6.8 |
| 1100 | 7.0 | 8.8 | 9.2 | 8.8 | 9.0 | 8.7 | 7.9 |
| 1200 | 7.8 | 9.5 | 9.4 | 9.2 | 9.4 | 9.4 | 8.2 |
| 1300 | 8.0 | 9.5 | 9.6 | 9.9 | 9.7 | 10.0 | 8.9 |
| 1400 | 9.2 | 10.1 | 9.6 | 10.5 | 10.5 | 9.6 | 9.7 |
| 1500 | 8.8 | 10.8 | 10.5 | 11.6 | 11.8 | 10.2 | 9.3 |
| 1600 | 8.1 | 9.6 | 9.4 | 10.2 | 10.1 | 10.9 | 9.7 |
| 1700 | 9.0 | 11.7 | 11.7 | 11.6 | 12.7 | 10.5 | 8.6 |

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| 1800 | 9.6 | 11.2 | 11.6 | 11.7 | 12.6 | 11.3 | 9.4 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 1900 | 10.2 | 11.0 | 11.6 | 11.7 | 11.9 | 10.5 | 8.9 |
| 2000 | 10.1 | 10.6 | 11.6 | 11.0 | 11.3 | 10.7 | 8.8 |
| 2100 | 9.5 | 10.2 | 12.1 | 10.5 | 10.7 | 10.2 | 9.3 |
| 2200 | 9.2 | 9.4 | 11.3 | 10.7 | 10.3 | 10.0 | 8.6 |
| 2300 | 10.5 | 10.3 | 11.8 | 12.4 | 12.1 | 11.5 | 10.0 |
|  |  |  |  |  |  |  | 1433.6 |

Table Northwestern D: Staffing Weekly Hours

| Hour | Sun | Mon | Tue | Wed | Thu | Fri | Sat |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 0000 | 22 | 17 | 18 | 28 | 27 | 30 | 25 |
| 0100 | 22 | 17 | 18 | 28 | 27 | 30 | 25 |
| 0200 | 22 | 9 | 9 | 13 | 12 | 14 | 25 |
| 0300 | 8 | 9 | 9 | 13 | 12 | 14 | 13 |
| 0400 | 8 | 9 | 9 | 13 | 12 | 14 | 13 |
| 0500 | 8 | 9 | 9 | 13 | 12 | 14 | 13 |
| 0600 | 8 | 9 | 9 | 13 | 12 | 14 | 13 |
| 0700 | 19 | 24 | 20 | 24 | 26 | 30 | 27 |
| 0800 | 11 | 15 | 11 | 11 | 14 | 16 | 14 |
| 0900 | 11 | 15 | 11 | 11 | 14 | 16 | 14 |
| 1000 | 11 | 15 | 11 | 11 | 14 | 16 | 14 |
| 1100 | 11 | 15 | 11 | 11 | 14 | 16 | 14 |
| 1200 | 11 | 15 | 11 | 11 | 14 | 16 | 14 |
| 1300 | 11 | 15 | 11 | 11 | 14 | 16 | 14 |
| 1400 | 11 | 15 | 11 | 11 | 14 | 16 | 14 |
| 1500 | 11 | 15 | 11 | 11 | 14 | 16 | 14 |
| 1600 | 21 | 28 | 26 | 26 | 30 | 16 | 14 |
| 1700 | 10 | 13 | 15 | 15 | 16 | 15 | 15 |
| 1800 | 10 | 13 | 15 | 15 | 16 | 15 | 15 |
| 1900 | 10 | 13 | 15 | 15 | 16 | 15 | 15 |
| 2000 | 10 | 13 | 15 | 15 | 16 | 15 | 15 |
| 2100 | 9 | 9 | 15 | 15 | 16 | 15 | 15 |
| 2200 | 17 | 18 | 28 | 27 | 30 | 25 | 22 |
| 2300 | 17 | 18 | 28 | 27 | 30 | 25 | 22 |
|  |  |  |  |  |  |  | 2641.0 |

Table Northwestern E: Average Patrol Time Consumed by Calls for Service

| Hour | Sun | Mon | Tue | Wed | Thu | Fri | Sat |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 0000 | $36.6 \%$ | $64.1 \%$ | $58.5 \%$ | $41.0 \%$ | $42.4 \%$ | $38.3 \%$ | $47.0 \%$ |
| 0100 | $49.8 \%$ | $53.0 \%$ | $50.2 \%$ | $35.0 \%$ | $37.0 \%$ | $31.7 \%$ | $44.9 \%$ |
| 0200 | $38.9 \%$ | $67.4 \%$ | $68.9 \%$ | $45.3 \%$ | $58.3 \%$ | $51.4 \%$ | $36.1 \%$ |
| 0300 | $92.7 \%$ | $65.9 \%$ | $59.6 \%$ | $40.4 \%$ | $46.0 \%$ | $45.4 \%$ | $49.4 \%$ |
| 0400 | $81.9 \%$ | $55.4 \%$ | $53.7 \%$ | $37.6 \%$ | $40.4 \%$ | $37.4 \%$ | $47.1 \%$ |
| 0500 | $72.7 \%$ | $47.4 \%$ | $43.9 \%$ | $34.7 \%$ | $40.1 \%$ | $32.0 \%$ | $42.3 \%$ |
| 0600 | $69.4 \%$ | $51.5 \%$ | $48.9 \%$ | $36.8 \%$ | $45.8 \%$ | $30.6 \%$ | $38.2 \%$ |

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| 0700 | $21.8 \%$ | $18.1 \%$ | $21.3 \%$ | $18.9 \%$ | $19.1 \%$ | $14.3 \%$ | $16.0 \%$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 0800 | $38.8 \%$ | $39.4 \%$ | $57.0 \%$ | $55.8 \%$ | $48.5 \%$ | $33.6 \%$ | $34.3 \%$ |
| 0900 | $47.4 \%$ | $47.3 \%$ | $65.3 \%$ | $68.3 \%$ | $54.9 \%$ | $40.2 \%$ | $40.0 \%$ |
| 1000 | $58.6 \%$ | $53.1 \%$ | $76.5 \%$ | $74.1 \%$ | $57.3 \%$ | $47.5 \%$ | $48.3 \%$ |
| 1100 | $63.8 \%$ | $58.7 \%$ | $83.2 \%$ | $80.2 \%$ | $63.9 \%$ | $54.5 \%$ | $56.5 \%$ |
| 1200 | $71.1 \%$ | $63.2 \%$ | $85.3 \%$ | $83.6 \%$ | $67.4 \%$ | $58.4 \%$ | $58.3 \%$ |
| 1300 | $72.3 \%$ | $63.0 \%$ | $86.8 \%$ | $89.8 \%$ | $69.2 \%$ | $62.3 \%$ | $63.2 \%$ |
| 1400 | $83.5 \%$ | $67.4 \%$ | $87.1 \%$ | $95.6 \%$ | $74.6 \%$ | $59.7 \%$ | $68.9 \%$ |
| 1500 | $79.7 \%$ | $71.7 \%$ | $95.6 \%$ | $105.2 \%$ | $84.5 \%$ | $63.9 \%$ | $66.4 \%$ |
| 1600 | $38.6 \%$ | $34.2 \%$ | $36.3 \%$ | $39.2 \%$ | $33.7 \%$ | $68.0 \%$ | $69.3 \%$ |
| 1700 | $89.7 \%$ | $89.9 \%$ | $78.2 \%$ | $77.4 \%$ | $79.6 \%$ | $69.8 \%$ | $57.1 \%$ |
| 1800 | $96.3 \%$ | $85.8 \%$ | $77.2 \%$ | $77.9 \%$ | $78.4 \%$ | $75.3 \%$ | $62.9 \%$ |
| 1900 | $102.3 \%$ | $84.2 \%$ | $77.2 \%$ | $78.0 \%$ | $74.5 \%$ | $69.8 \%$ | $59.2 \%$ |
| 2000 | $100.5 \%$ | $81.7 \%$ | $77.3 \%$ | $73.2 \%$ | $70.6 \%$ | $71.0 \%$ | $58.9 \%$ |
| 2100 | $105.6 \%$ | $113.7 \%$ | $80.3 \%$ | $69.9 \%$ | $66.6 \%$ | $68.1 \%$ | $62.2 \%$ |
| 2200 | $53.9 \%$ | $52.1 \%$ | $40.2 \%$ | $39.6 \%$ | $34.4 \%$ | $40.1 \%$ | $38.9 \%$ |
| 2300 | $61.8 \%$ | $57.1 \%$ | $42.3 \%$ | $45.9 \%$ | $40.4 \%$ | $45.8 \%$ | $45.5 \%$ |
|  |  |  |  |  |  |  | $58.7 \%$ |

Table Northwestern F: Average Patrol Time Consumed by Self-Initiated Activities

| Hour | l lun | Mon | Tue | Wed | Thu | Fri | Sat |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 0000 | $7.9 \%$ | $9.2 \%$ | $7.0 \%$ | $5.8 \%$ | $7.2 \%$ | $5.6 \%$ | $7.0 \%$ |
| 0100 | $7.7 \%$ | $7.1 \%$ | $6.6 \%$ | $4.7 \%$ | $5.9 \%$ | $5.1 \%$ | $6.7 \%$ |
| 0200 | $5.2 \%$ | $9.4 \%$ | $10.6 \%$ | $7.4 \%$ | $9.4 \%$ | $7.1 \%$ | $5.3 \%$ |
| 0300 | $12.9 \%$ | $7.4 \%$ | $9.3 \%$ | $5.6 \%$ | $6.8 \%$ | $5.6 \%$ | $5.9 \%$ |
| 0400 | $9.6 \%$ | $4.8 \%$ | $8.3 \%$ | $5.3 \%$ | $5.1 \%$ | $4.8 \%$ | $5.4 \%$ |
| 0500 | $7.7 \%$ | $5.4 \%$ | $7.4 \%$ | $4.4 \%$ | $4.6 \%$ | $3.7 \%$ | $4.4 \%$ |
| 0600 | $6.9 \%$ | $6.1 \%$ | $9.8 \%$ | $5.1 \%$ | $4.0 \%$ | $3.2 \%$ | $4.0 \%$ |
| 0700 | $1.5 \%$ | $1.6 \%$ | $2.5 \%$ | $1.4 \%$ | $1.6 \%$ | $0.7 \%$ | $1.7 \%$ |
| 0800 | $2.4 \%$ | $2.4 \%$ | $1.5 \%$ | $3.8 \%$ | $2.6 \%$ | $1.0 \%$ | $1.8 \%$ |
| 0900 | $2.9 \%$ | $4.0 \%$ | $3.8 \%$ | $6.2 \%$ | $3.7 \%$ | $1.8 \%$ | $2.4 \%$ |
| 1000 | $5.2 \%$ | $4.3 \%$ | $5.8 \%$ | $5.8 \%$ | $5.0 \%$ | $3.6 \%$ | $2.7 \%$ |
| 1100 | $7.4 \%$ | $3.3 \%$ | $7.7 \%$ | $5.3 \%$ | $6.8 \%$ | $4.0 \%$ | $4.0 \%$ |
| 1200 | $6.7 \%$ | $3.7 \%$ | $7.9 \%$ | $7.3 \%$ | $8.1 \%$ | $4.0 \%$ | $4.3 \%$ |
| 1300 | $5.8 \%$ | $3.4 \%$ | $8.6 \%$ | $9.5 \%$ | $7.9 \%$ | $4.2 \%$ | $5.0 \%$ |
| 1400 | $6.7 \%$ | $4.2 \%$ | $8.3 \%$ | $10.5 \%$ | $7.1 \%$ | $5.3 \%$ | $4.3 \%$ |
| 1500 | $8.8 \%$ | $5.3 \%$ | $10.3 \%$ | $13.9 \%$ | $6.4 \%$ | $6.7 \%$ | $5.2 \%$ |
| 1600 | $4.1 \%$ | $1.8 \%$ | $3.8 \%$ | $4.4 \%$ | $2.6 \%$ | $8.0 \%$ | $3.3 \%$ |
| 1700 | $5.8 \%$ | $4.1 \%$ | $5.4 \%$ | $7.0 \%$ | $5.4 \%$ | $7.6 \%$ | $2.3 \%$ |
| 1800 | $7.0 \%$ | $5.0 \%$ | $6.7 \%$ | $8.3 \%$ | $6.7 \%$ | $7.2 \%$ | $3.0 \%$ |
| 1900 | $9.2 \%$ | $5.8 \%$ | $8.9 \%$ | $11.6 \%$ | $8.4 \%$ | $7.1 \%$ | $4.2 \%$ |
| 2000 | $11.2 \%$ | $5.6 \%$ | $9.1 \%$ | $12.6 \%$ | $8.2 \%$ | $6.1 \%$ | $5.1 \%$ |
| 2100 | $14.3 \%$ | $8.1 \%$ | $8.7 \%$ | $12.1 \%$ | $8.2 \%$ | $6.0 \%$ | $4.9 \%$ |
| 2200 | $7.6 \%$ | $5.3 \%$ | $4.5 \%$ | $6.3 \%$ | $3.7 \%$ | $5.0 \%$ | $3.8 \%$ |
| 2300 | $8.4 \%$ | $5.5 \%$ | $5.5 \%$ | $6.7 \%$ | $4.9 \%$ | $6.2 \%$ | $6.4 \%$ |
|  |  |  |  |  |  |  | $5.9 \%$ |

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### 13.6.7 Western District

## Table Western A: Most Frequent Calls for Service

District Dispatched Calls for Service: ${ }^{324} 98,630$
Number of Dispatched Calls in the Most Frequent Calls for Service List: 80,686
Percentage of Dispatched Calls that are in the Most Frequent Calls for Service List: 82 percent

| Dispatched Call Type | Number |
| :---: | :---: |
| 89-911/NO VOICE CALL | 11728 |
| 55 - DISORDERLY PERSON | 10874 |
| 870 - NARCOTICS OUTSIDE | 9507 |
| 4E - COMMON ASSAULT | 9321 |
| 79 - OTHER | 7733 |
| 49 - FAMILY DISTURBANCE | 4631 |
| 5G - BURGLARY | 4155 |
| 54 - ARMED PERSON | 3058 |
| 30 - ACCIDENT-AUTO | 2903 |
| 65 - SILENT ALARM | 2846 |
| 4D - AGG ASSAULT - HANDS | 1876 |
| 6J - LARCENY- OTHER | 1875 |
| 99 - ACCIDENT-HIT \& RUN | 1539 |
| 75 - DESTRUCT. OF PROPERTY | 1360 |
| 31 - ACCIDENT-PERSON INJ. | 1301 |
| 83 - DISCHARGING FIREARM | 1271 |
| 4A - AGG ASSAULT - GUN | 1249 |
| 57 - SUSPICIOUS PERSON | 1180 |
| 7C - STOLEN VEH./OTHER | 1171 |
| 87 - NARCOTICS - INSIDE | 1108 |

## Table Western B: Most Frequent Self-Initiated Activities

District Records Labeled Self-Initiated: ${ }^{325}$ 6,756
Number of Activities in the Most Frequent Self-Initiated Activities List: 6,174
Percentage of Dispatched Calls that are in the Most Frequent Calls for Service List: 91 percent

[^84]| Dispatched Call Type | Number |
| :---: | :---: |
| 20D - DETAIL | 2620 |
| 25 - CAR STOP | 1156 |
| FI- FIELD INTERVIEW | 686 |
| 20Z-OTHER | 217 |
| 61 - PERSON WANTED ON WAR | 214 |
| 30 - ACCIDENT-AUTO | 211 |
| 79 - OTHER | 139 |
| 31 - ACCIDENT-PERSON INJ. | 134 |
| 20F - WARRANT | 104 |
| 26 - RECOVERED VEHICLE | 91 |
| 20B - FOOT PATROL | 73 |
| 20A - FOLLOWUP | 72 |
| 87V - NARCOTICS-ONVIEW | 71 |
| 81 - RECOVERED PROPERTY | 66 |
| 60 - SICK PERSON | 65 |
| 4E - COMMON ASSAULT | 59 |
| 55 - DISORDERLY PERSON | 55 |
| 83 - DISCHARGING FIREARM | 53 |
| 20J - TRANSPORT | 44 |
| 99 - ACCIDENT-HIT \& RUN | 44 |

Table Western C: Calls for Service Time in Hours

| Hour | Sun | Mon | Tue | Wed | Thu | Fri | Sat |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 0000 | 7.1 | 8.3 | 8.3 | 8.5 | 8.9 | 8.5 | 9.2 |
| 0100 | 9.2 | 6.7 | 5.5 | 6.0 | 7.1 | 6.9 | 8.5 |
| 0200 | 7.3 | 4.4 | 4.4 | 3.9 | 4.8 | 4.8 | 7.4 |
| 0300 | 6.0 | 3.6 | 4.2 | 3.4 | 4.4 | 4.7 | 5.8 |
| 0400 | 4.8 | 3.5 | 3.5 | 3.1 | 3.1 | 4.5 | 5.2 |
| 0500 | 4.2 | 3.2 | 2.9 | 2.6 | 2.6 | 3.6 | 4.1 |
| 0600 | 4.1 | 3.4 | 2.9 | 2.2 | 3.1 | 3.5 | 3.9 |
| 0700 | 4.4 | 3.5 | 3.4 | 2.6 | 3.5 | 4.5 | 4.0 |
| 0800 | 4.8 | 5.4 | 4.6 | 4.2 | 4.8 | 6.2 | 5.0 |
| 0900 | 5.6 | 6.3 | 6.3 | 6.1 | 6.5 | 7.3 | 6.0 |
| 1000 | 6.6 | 7.1 | 7.4 | 7.1 | 7.6 | 7.5 | 6.7 |
| 1100 | 8.1 | 7.7 | 8.3 | 7.1 | 7.7 | 7.9 | 6.9 |
| 1200 | 8.8 | 8.6 | 8.5 | 8.0 | 8.7 | 8.9 | 8.0 |
| 1300 | 9.3 | 9.3 | 9.0 | 8.4 | 8.5 | 9.0 | 8.7 |
| 1400 | 8.4 | 7.7 | 8.3 | 8.4 | 8.1 | 7.7 | 7.9 |
| 1500 | 8.3 | 8.8 | 8.7 | 9.0 | 8.5 | 8.3 | 8.1 |
| 1600 | 7.5 | 7.5 | 7.3 | 7.5 | 7.0 | 8.8 | 8.1 |
| 1700 | 8.1 | 8.6 | 9.4 | 9.8 | 7.6 | 7.0 | 7.3 |

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| 1800 | 8.3 | 8.7 | 9.9 | 9.5 | 8.5 | 8.8 | 7.9 |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| 1900 | 8.0 | 8.5 | 9.1 | 9.2 | 8.7 | 8.4 | 7.5 |
| 2000 | 8.3 | 8.4 | 8.8 | 8.9 | 7.7 | 8.3 | 7.8 |
| 2100 | 7.7 | 7.6 | 8.4 | 8.8 | 7.6 | 8.0 | 7.7 |
| 2200 | 7.4 | 7.3 | 7.7 | 8.6 | 7.6 | 8.6 | 8.0 |
| 2300 | 8.0 | 8.0 | 8.2 | 9.6 | 8.2 | 9.9 | 9.6 |
|  |  |  |  |  |  |  | 1160.8 |

Table Western D: Staffing Weekly Hours

|  | Sun | Mon | Tue | Wed | Fri | Sat |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 0000 | 27 | 22 | 28 | 29 | 22 | 32 | 35 |
| 0100 | 27 | 22 | 28 | 29 | 22 | 32 | 35 |
| 0200 | 27 | 10 | 11 | 12 | 12 | 18 | 35 |
| 0300 | 12 | 10 | 11 | 12 | 12 | 18 | 18 |
| 0400 | 12 | 10 | 11 | 12 | 12 | 18 | 18 |
| 0500 | 12 | 10 | 11 | 12 | 12 | 18 | 18 |
| 0600 | 12 | 10 | 11 | 12 | 12 | 18 | 18 |
| 0700 | 23 | 24 | 27 | 28 | 29 | 33 | 33 |
| 0800 | 11 | 14 | 16 | 16 | 17 | 15 | 15 |
| 0900 | 11 | 14 | 16 | 16 | 17 | 15 | 15 |
| 1000 | 11 | 14 | 16 | 16 | 17 | 15 | 15 |
| 1100 | 11 | 14 | 16 | 16 | 17 | 15 | 15 |
| 1200 | 11 | 14 | 16 | 15 | 17 | 15 | 15 |
| 1300 | 11 | 14 | 16 | 15 | 17 | 15 | 15 |
| 1400 | 11 | 14 | 16 | 15 | 17 | 15 | 15 |
| 1500 | 11 | 14 | 16 | 15 | 17 | 15 | 15 |
| 1600 | 26 | 31 | 33 | 25 | 32 | 15 | 15 |
| 1700 | 15 | 17 | 17 | 10 | 15 | 17 | 15 |
| 1800 | 15 | 17 | 17 | 10 | 15 | 17 | 15 |
| 1900 | 15 | 17 | 17 | 10 | 15 | 17 | 15 |
| 2000 | 15 | 17 | 17 | 10 | 15 | 17 | 15 |
| 2100 | 12 | 17 | 17 | 10 | 14 | 17 | 15 |
| 2200 | 22 | 28 | 29 | 22 | 32 | 35 | 27 |
| 2300 | 22 | 28 | 29 | 22 | 32 | 35 | 27 |
|  |  |  |  |  |  |  | 3005.0 |

Table Western E: Average Patrol Time Consumed by Calls for Service

| Hour | Sun | Mon | Tue | Wed | Thu | Fri | Sat |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 0000 | $26.4 \%$ | $37.5 \%$ | $29.5 \%$ | $29.2 \%$ | $40.2 \%$ | $26.7 \%$ | $26.1 \%$ |
| 0100 | $34.0 \%$ | $30.4 \%$ | $19.8 \%$ | $20.7 \%$ | $32.1 \%$ | $21.7 \%$ | $24.3 \%$ |
| 0200 | $27.0 \%$ | $43.5 \%$ | $39.8 \%$ | $32.1 \%$ | $39.7 \%$ | $26.9 \%$ | $21.1 \%$ |
| 0300 | $50.1 \%$ | $36.3 \%$ | $38.3 \%$ | $28.2 \%$ | $36.5 \%$ | $26.0 \%$ | $32.0 \%$ |
| 0400 | $40.1 \%$ | $34.5 \%$ | $31.5 \%$ | $26.1 \%$ | $26.0 \%$ | $24.9 \%$ | $28.9 \%$ |
| 0500 | $35.3 \%$ | $31.8 \%$ | $26.1 \%$ | $21.5 \%$ | $21.5 \%$ | $20.0 \%$ | $22.8 \%$ |
| 0600 | $34.4 \%$ | $33.7 \%$ | $26.2 \%$ | $18.5 \%$ | $25.6 \%$ | $19.6 \%$ | $21.4 \%$ |

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| 0700 | $18.9 \%$ | $14.7 \%$ | $12.7 \%$ | $9.3 \%$ | $12.1 \%$ | $13.5 \%$ | $12.0 \%$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 0800 | $43.6 \%$ | $38.5 \%$ | $28.5 \%$ | $26.4 \%$ | $28.1 \%$ | $41.4 \%$ | $33.0 \%$ |
| 0900 | $51.2 \%$ | $44.8 \%$ | $39.5 \%$ | $38.2 \%$ | $38.3 \%$ | $48.7 \%$ | $39.9 \%$ |
| 1000 | $60.0 \%$ | $50.8 \%$ | $46.1 \%$ | $44.2 \%$ | $44.5 \%$ | $49.9 \%$ | $44.7 \%$ |
| 1100 | $73.8 \%$ | $55.1 \%$ | $51.8 \%$ | $44.2 \%$ | $45.3 \%$ | $52.9 \%$ | $46.2 \%$ |
| 1200 | $80.2 \%$ | $61.1 \%$ | $53.3 \%$ | $53.4 \%$ | $51.0 \%$ | $59.0 \%$ | $53.1 \%$ |
| 1300 | $84.2 \%$ | $66.5 \%$ | $56.1 \%$ | $56.0 \%$ | $50.1 \%$ | $59.8 \%$ | $57.7 \%$ |
| 1400 | $76.2 \%$ | $55.1 \%$ | $51.9 \%$ | $56.2 \%$ | $47.6 \%$ | $51.2 \%$ | $52.9 \%$ |
| 1500 | $75.8 \%$ | $62.7 \%$ | $54.3 \%$ | $60.0 \%$ | $49.9 \%$ | $55.4 \%$ | $54.0 \%$ |
| 1600 | $28.8 \%$ | $24.0 \%$ | $22.0 \%$ | $30.1 \%$ | $21.9 \%$ | $58.9 \%$ | $54.2 \%$ |
| 1700 | $53.8 \%$ | $50.7 \%$ | $55.4 \%$ | $98.0 \%$ | $50.9 \%$ | $41.4 \%$ | $48.4 \%$ |
| 1800 | $55.0 \%$ | $50.9 \%$ | $58.4 \%$ | $95.0 \%$ | $56.7 \%$ | $51.9 \%$ | $52.6 \%$ |
| 1900 | $53.4 \%$ | $49.8 \%$ | $53.5 \%$ | $92.2 \%$ | $58.0 \%$ | $49.2 \%$ | $49.8 \%$ |
| 2000 | $55.3 \%$ | $49.5 \%$ | $51.8 \%$ | $89.2 \%$ | $51.1 \%$ | $48.8 \%$ | $51.7 \%$ |
| 2100 | $63.8 \%$ | $44.9 \%$ | $49.6 \%$ | $87.5 \%$ | $54.4 \%$ | $47.0 \%$ | $51.3 \%$ |
| 2200 | $33.8 \%$ | $26.2 \%$ | $26.4 \%$ | $39.2 \%$ | $23.8 \%$ | $24.6 \%$ | $29.6 \%$ |
| 2300 | $36.3 \%$ | $28.6 \%$ | $28.4 \%$ | $43.6 \%$ | $25.7 \%$ | $28.3 \%$ | $35.4 \%$ |
|  |  |  |  |  |  |  | $42.4 \%$ |

Table Western F: Average Patrol Time Consumed by Self-Initiated Activities

| Hour | Sun | Mon | Tue | Wed | Thu | lri | Sat |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 0000 | $5.6 \%$ | $8.6 \%$ | $7.3 \%$ | $8.4 \%$ | $8.3 \%$ | $7.7 \%$ | $6.3 \%$ |
| 0100 | $5.5 \%$ | $7.9 \%$ | $6.7 \%$ | $6.5 \%$ | $6.6 \%$ | $6.9 \%$ | $6.6 \%$ |
| 0200 | $3.9 \%$ | $13.8 \%$ | $13.0 \%$ | $9.7 \%$ | $7.8 \%$ | $7.3 \%$ | $5.9 \%$ |
| 0300 | $8.3 \%$ | $10.5 \%$ | $10.3 \%$ | $8.1 \%$ | $6.5 \%$ | $6.0 \%$ | $7.3 \%$ |
| 0400 | $6.0 \%$ | $8.8 \%$ | $9.1 \%$ | $5.0 \%$ | $5.8 \%$ | $4.9 \%$ | $6.0 \%$ |
| 0500 | $4.6 \%$ | $5.7 \%$ | $8.0 \%$ | $3.8 \%$ | $3.9 \%$ | $3.2 \%$ | $6.1 \%$ |
| 0600 | $2.8 \%$ | $3.7 \%$ | $7.6 \%$ | $2.9 \%$ | $2.2 \%$ | $2.2 \%$ | $5.5 \%$ |
| 0700 | $1.4 \%$ | $1.5 \%$ | $2.1 \%$ | $1.4 \%$ | $1.7 \%$ | $1.2 \%$ | $2.3 \%$ |
| 0800 | $3.8 \%$ | $4.9 \%$ | $3.0 \%$ | $2.6 \%$ | $3.9 \%$ | $2.8 \%$ | $4.0 \%$ |
| 0900 | $4.5 \%$ | $7.3 \%$ | $4.6 \%$ | $3.9 \%$ | $5.2 \%$ | $3.7 \%$ | $6.6 \%$ |
| 1000 | $6.4 \%$ | $8.5 \%$ | $6.3 \%$ | $6.1 \%$ | $7.0 \%$ | $4.4 \%$ | $7.1 \%$ |
| 1100 | $6.2 \%$ | $11.0 \%$ | $7.9 \%$ | $7.9 \%$ | $7.0 \%$ | $4.6 \%$ | $8.2 \%$ |
| 1200 | $7.4 \%$ | $10.7 \%$ | $10.2 \%$ | $8.0 \%$ | $6.7 \%$ | $5.9 \%$ | $7.7 \%$ |
| 1300 | $7.6 \%$ | $10.7 \%$ | $10.0 \%$ | $9.2 \%$ | $8.8 \%$ | $9.0 \%$ | $7.3 \%$ |
| 1400 | $7.1 \%$ | $11.4 \%$ | $8.6 \%$ | $7.0 \%$ | $9.8 \%$ | $9.8 \%$ | $9.6 \%$ |
| 1500 | $6.8 \%$ | $11.1 \%$ | $10.3 \%$ | $7.1 \%$ | $10.0 \%$ | $9.2 \%$ | $10.0 \%$ |
| 1600 | $2.5 \%$ | $3.4 \%$ | $3.8 \%$ | $3.3 \%$ | $3.9 \%$ | $9.2 \%$ | $9.1 \%$ |
| 1700 | $5.0 \%$ | $5.9 \%$ | $8.1 \%$ | $10.0 \%$ | $6.2 \%$ | $7.1 \%$ | $7.0 \%$ |
| 1800 | $7.6 \%$ | $8.5 \%$ | $8.0 \%$ | $11.8 \%$ | $7.2 \%$ | $8.4 \%$ | $7.0 \%$ |
| 1900 | $6.4 \%$ | $7.1 \%$ | $7.1 \%$ | $13.5 \%$ | $7.2 \%$ | $9.9 \%$ | $8.2 \%$ |
| 2000 | $7.3 \%$ | $6.8 \%$ | $6.9 \%$ | $14.0 \%$ | $9.6 \%$ | $8.8 \%$ | $9.3 \%$ |
| 2100 | $10.6 \%$ | $7.5 \%$ | $8.0 \%$ | $11.7 \%$ | $10.5 \%$ | $8.2 \%$ | $8.9 \%$ |
| 2200 | $5.7 \%$ | $5.1 \%$ | $6.3 \%$ | $5.5 \%$ | $5.4 \%$ | $4.2 \%$ | $4.6 \%$ |
| 2300 | $7.0 \%$ | $6.2 \%$ | $8.2 \%$ | $6.9 \%$ | $6.7 \%$ | $5.0 \%$ | $6.2 \%$ |
|  |  |  |  |  |  |  | $6.9 \%$ |

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### 13.6.8 Southwestern District

Table Southwestern A: Most Frequent Calls for Service
District Dispatched Calls for Service: ${ }^{326} 109,000$
Number of Dispatched Calls in the Most Frequent Calls for Service List: 86,888
Percentage of Dispatched Calls that are in the Most Frequent Calls for Service List: 80 percent

| Dispatched Call Type | Number |
| :---: | :---: |
| 55 - DISORDERLY PERSON | 12014 |
| 89-911/NO VOICE CALL | 11765 |
| 4E - COMMON ASSAULT | 9853 |
| 79 - OTHER | 8624 |
| 870 - NARCOTICS OUTSIDE | 5519 |
| 49 - FAMILY DISTURBANCE | 4966 |
| 5G - BURGLARY | 4907 |
| 65 - SILENT ALARM | 4312 |
| 30 - ACCIDENT-AUTO | 3814 |
| 54 - ARMED PERSON | 3242 |
| 6J-LARCENY- OTHER | 2388 |
| 99 - ACCIDENT-HIT \& RUN | 2198 |
| 4D - AGG ASSAULT-HANDS | 2027 |
| 57 - SUSPICIOUS PERSON | 1961 |
| 75 - DESTRUCT. OF PROPERTY | 191 |
| 83 - DISCHARGING FIREARM | 1740 |
| 7C - STOLEN VEH./OTHER | 1677 |
| 31 - ACCIDENT-PERSON INJ. | 1443 |
| 69 - INVESTIGATE AUTO | 1304 |
| 4A - AGG ASSAULT - GUN | 1223 |

Table Southwestern B: Most Frequent Self-Initiated Activities
District Records Labeled Self-Initiated: ${ }^{327}$ 5,672
Number of Activities in the Most Frequent Self-Initiated Activities List: 5,191
Percentage of Dispatched Calls that are in the Most Frequent Calls for Service List: 92 percent

[^85]| Dispatched Call Type | Number |
| :---: | :---: |
| 20D - DETAIL | 2436 |
| 25 - CAR STOP | 956 |
| FI - FIELD INTERVIEW | 428 |
| 61 - PERSON WANTED ON WAR | 210 |
| 20F - WARRANT | 190 |
| 79 - OTHER | 175 |
| 30 - ACCIDENT-AUTO | 147 |
| 20Z-OTHER | 103 |
| 81 - RECOVERED PROPERTY | 85 |
| 31 - ACCIDENT-PERSON INJ. | 76 |
| 20A - FOLLOWUP | 51 |
| 4E - COMMON ASSAULT | 45 |
| 24 - TOWED VEHICLE | 44 |
| 75 - DESTRUCT. OF PROPERTY | 39 |
| 87 - NARCOTICS - INSIDE | 38 |
| 6 J - LARCENY- OTHER | 36 |
| 20J - TRANSPORT | 34 |
| 99 - ACCIDENT-HIT \& RUN | 34 |
| 80 - LOST PROPERTY | 33 |
| 20B - FOOT PATROL | 31 |

Table Southwestern C: Calls for Service Time in Hours

| Hour | Sun | Mon | lue | Wed | lhu | Sat |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 0000 | 9.1 | 12.4 | 11.5 | 12.4 | 11.6 | 11.6 | 13.5 |
| 0100 | 12.8 | 10.5 | 9.5 | 10.2 | 9.3 | 10.2 | 12.0 |
| 0200 | 11.2 | 8.0 | 7.2 | 7.8 | 6.8 | 8.0 | 10.0 |
| 0300 | 8.6 | 6.8 | 6.2 | 7.4 | 6.0 | 6.7 | 8.0 |
| 0400 | 7.3 | 6.1 | 5.9 | 6.7 | 5.3 | 5.9 | 7.3 |
| 0500 | 6.3 | 5.2 | 4.9 | 5.5 | 5.1 | 5.1 | 6.8 |
| 0600 | 5.9 | 5.1 | 5.0 | 6.0 | 5.5 | 5.3 | 6.7 |
| 0700 | 5.4 | 5.0 | 5.7 | 6.0 | 5.4 | 5.8 | 6.0 |
| 0800 | 5.5 | 5.7 | 8.0 | 7.3 | 6.3 | 6.8 | 5.5 |
| 0900 | 6.0 | 7.3 | 9.2 | 7.9 | 7.5 | 7.3 | 6.8 |
| 1000 | 7.1 | 8.2 | 9.5 | 8.4 | 8.1 | 7.8 | 8.7 |
| 1100 | 8.6 | 8.6 | 10.1 | 9.6 | 8.9 | 8.9 | 9.5 |
| 1200 | 8.9 | 9.8 | 11.1 | 10.1 | 9.0 | 9.8 | 10.0 |
| 1300 | 9.7 | 10.8 | 11.1 | 10.9 | 9.5 | 10.1 | 10.7 |
| 1400 | 9.9 | 11.3 | 11.3 | 11.1 | 10.7 | 10.4 | 10.4 |
| 1500 | 9.9 | 10.9 | 11.1 | 11.9 | 12.0 | 10.7 | 10.1 |
| 1600 | 8.4 | 9.7 | 9.1 | 10.5 | 10.2 | 11.2 | 10.2 |
| 1700 | 10.6 | 12.6 | 12.4 | 12.7 | 11.6 | 9.3 | 8.4 |

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| 1800 | 11.4 | 12.8 | 13.1 | 13.4 | 12.1 | 10.7 | 10.1 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 1900 | 11.6 | 12.5 | 13.2 | 12.0 | 11.8 | 11.2 | 9.9 |
| 2000 | 11.5 | 12.4 | 12.8 | 12.9 | 11.6 | 11.2 | 10.3 |
| 2100 | 11.5 | 12.4 | 13.0 | 13.4 | 11.9 | 10.6 | 10.6 |
| 2200 | 11.9 | 12.9 | 12.8 | 12.3 | 11.9 | 12.2 | 10.5 |
| 2300 | 13.2 | 13.5 | 13.7 | 13.0 | 12.3 | 13.6 | 11.7 |
|  |  |  |  |  |  |  | 1592.867 |

Table Southwestern D: Staffing Weekly Hours

| Hour | Sun | Mon | Tue | Wed | Fri | Sat |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 0000 | 27 | 27 | 24 | 20 | 19 | 30 | 32 |
| 0100 | 27 | 27 | 24 | 20 | 19 | 30 | 32 |
| 0200 | 27 | 11 | 9 | 10 | 9 | 11 | 32 |
| 0300 | 9 | 11 | 9 | 10 | 9 | 11 | 10 |
| 0400 | 9 | 11 | 9 | 10 | 9 | 11 | 10 |
| 0500 | 9 | 11 | 9 | 10 | 9 | 11 | 10 |
| 0600 | 9 | 11 | 9 | 10 | 9 | 11 | 10 |
| 0700 | 27 | 27 | 24 | 26 | 27 | 27 | 24 |
| 0800 | 18 | 18 | 15 | 16 | 18 | 16 | 14 |
| 0900 | 18 | 18 | 15 | 16 | 18 | 16 | 14 |
| 1000 | 18 | 18 | 15 | 16 | 18 | 16 | 14 |
| 1100 | 18 | 18 | 15 | 16 | 18 | 16 | 14 |
| 1200 | 18 | 18 | 15 | 16 | 18 | 16 | 13 |
| 1300 | 18 | 18 | 15 | 16 | 18 | 16 | 13 |
| 1400 | 18 | 18 | 15 | 16 | 18 | 16 | 13 |
| 1500 | 18 | 18 | 15 | 16 | 18 | 16 | 13 |
| 1600 | 34 | 33 | 30 | 31 | 37 | 16 | 13 |
| 1700 | 16 | 15 | 15 | 15 | 19 | 22 | 18 |
| 1800 | 16 | 15 | 15 | 15 | 19 | 22 | 18 |
| 1900 | 16 | 15 | 15 | 15 | 19 | 22 | 18 |
| 2000 | 16 | 15 | 15 | 15 | 19 | 22 | 18 |
| 2100 | 16 | 15 | 10 | 10 | 19 | 22 | 18 |
| 2200 | 27 | 24 | 20 | 19 | 30 | 32 | 27 |
| 2300 | 27 | 24 | 20 | 19 | 30 | 32 | 27 |
|  |  |  |  |  |  |  | 2983 |

Table Southwestern E: Average Patrol Time Consumed by Calls for Service

| Hour | Sun | Mon | Tue | Wed | Thu | Fri | Sat |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 0000 | $33.8 \%$ | $45.9 \%$ | $47.9 \%$ | $61.8 \%$ | $61.0 \%$ | $38.6 \%$ | $42.1 \%$ |
| 0100 | $47.5 \%$ | $38.9 \%$ | $39.7 \%$ | $50.8 \%$ | $48.9 \%$ | $33.9 \%$ | $37.6 \%$ |
| 0200 | $41.6 \%$ | $73.0 \%$ | $79.6 \%$ | $78.3 \%$ | $75.4 \%$ | $72.4 \%$ | $31.3 \%$ |
| 0300 | $95.6 \%$ | $61.8 \%$ | $68.5 \%$ | $74.0 \%$ | $66.5 \%$ | $60.8 \%$ | $80.0 \%$ |
| 0400 | $80.7 \%$ | $55.3 \%$ | $65.4 \%$ | $66.8 \%$ | $58.9 \%$ | $53.5 \%$ | $73.3 \%$ |
| 0500 | $69.8 \%$ | $47.1 \%$ | $54.3 \%$ | $55.0 \%$ | $56.5 \%$ | $46.4 \%$ | $67.5 \%$ |
| 0600 | $65.9 \%$ | $46.2 \%$ | $55.6 \%$ | $59.5 \%$ | $60.7 \%$ | $47.7 \%$ | $66.7 \%$ |

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| 0700 | $20.0 \%$ | $18.3 \%$ | $23.8 \%$ | $22.9 \%$ | $19.9 \%$ | $21.3 \%$ | $24.8 \%$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 0800 | $30.7 \%$ | $31.7 \%$ | $53.3 \%$ | $45.6 \%$ | $35.2 \%$ | $42.4 \%$ | $39.0 \%$ |
| 0900 | $33.3 \%$ | $40.6 \%$ | $61.6 \%$ | $49.4 \%$ | $41.7 \%$ | $45.5 \%$ | $48.5 \%$ |
| 1000 | $39.4 \%$ | $45.7 \%$ | $63.4 \%$ | $52.5 \%$ | $45.1 \%$ | $48.9 \%$ | $61.8 \%$ |
| 1100 | $47.9 \%$ | $48.0 \%$ | $67.0 \%$ | $59.7 \%$ | $49.3 \%$ | $55.4 \%$ | $68.0 \%$ |
| 1200 | $49.2 \%$ | $54.2 \%$ | $73.8 \%$ | $63.1 \%$ | $49.8 \%$ | $60.9 \%$ | $76.9 \%$ |
| 1300 | $53.7 \%$ | $60.2 \%$ | $74.0 \%$ | $68.3 \%$ | $52.9 \%$ | $63.3 \%$ | $82.3 \%$ |
| 1400 | $54.9 \%$ | $62.5 \%$ | $75.0 \%$ | $69.5 \%$ | $59.6 \%$ | $64.9 \%$ | $80.1 \%$ |
| 1500 | $55.0 \%$ | $60.7 \%$ | $73.9 \%$ | $74.4 \%$ | $66.8 \%$ | $66.8 \%$ | $77.3 \%$ |
| 1600 | $24.7 \%$ | $29.4 \%$ | $30.4 \%$ | $33.8 \%$ | $27.7 \%$ | $70.2 \%$ | $78.3 \%$ |
| 1700 | $66.5 \%$ | $84.1 \%$ | $82.6 \%$ | $84.6 \%$ | $61.2 \%$ | $42.3 \%$ | $46.6 \%$ |
| 1800 | $71.5 \%$ | $85.6 \%$ | $87.2 \%$ | $89.2 \%$ | $63.4 \%$ | $48.4 \%$ | $56.1 \%$ |
| 1900 | $72.4 \%$ | $83.6 \%$ | $87.8 \%$ | $80.2 \%$ | $62.3 \%$ | $50.8 \%$ | $55.2 \%$ |
| 2000 | $71.7 \%$ | $82.7 \%$ | $85.1 \%$ | $86.1 \%$ | $61.1 \%$ | $50.8 \%$ | $56.9 \%$ |
| 2100 | $71.9 \%$ | $82.4 \%$ | $129.7 \%$ | $133.5 \%$ | $62.7 \%$ | $48.2 \%$ | $59.1 \%$ |
| 2200 | $44.2 \%$ | $53.6 \%$ | $64.2 \%$ | $64.6 \%$ | $39.8 \%$ | $38.0 \%$ | $39.0 \%$ |
| 2300 | $48.9 \%$ | $56.2 \%$ | $68.3 \%$ | $68.2 \%$ | $40.9 \%$ | $42.5 \%$ | $43.1 \%$ |
|  |  |  |  |  |  |  | $57.8 \%$ |

Table Southwestern F: Average Patrol Time Consumed by Self-Initiated Activities

| Hour | Sun | Mon | Tue | Wed | Thu | lri | Sat |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 0000 | $5.4 \%$ | $5.0 \%$ | $5.9 \%$ | $8.3 \%$ | $7.2 \%$ | $6.8 \%$ | $5.5 \%$ |
| 0100 | $6.7 \%$ | $4.1 \%$ | $4.2 \%$ | $7.8 \%$ | $6.8 \%$ | $6.0 \%$ | $5.8 \%$ |
| 0200 | $5.4 \%$ | $7.1 \%$ | $6.7 \%$ | $12.2 \%$ | $10.4 \%$ | $9.5 \%$ | $5.7 \%$ |
| 0300 | $9.3 \%$ | $6.2 \%$ | $5.9 \%$ | $10.3 \%$ | $7.4 \%$ | $8.2 \%$ | $10.5 \%$ |
| 0400 | $8.7 \%$ | $4.4 \%$ | $4.6 \%$ | $9.2 \%$ | $5.2 \%$ | $7.4 \%$ | $7.7 \%$ |
| 0500 | $5.7 \%$ | $3.3 \%$ | $4.8 \%$ | $7.3 \%$ | $4.3 \%$ | $7.3 \%$ | $5.8 \%$ |
| 0600 | $7.0 \%$ | $2.7 \%$ | $3.5 \%$ | $6.7 \%$ | $4.4 \%$ | $7.0 \%$ | $3.8 \%$ |
| 0700 | $1.9 \%$ | $0.7 \%$ | $0.9 \%$ | $2.8 \%$ | $1.4 \%$ | $1.6 \%$ | $1.4 \%$ |
| 0800 | $3.3 \%$ | $1.8 \%$ | $2.3 \%$ | $4.4 \%$ | $2.4 \%$ | $2.3 \%$ | $3.3 \%$ |
| 0900 | $6.0 \%$ | $2.5 \%$ | $3.2 \%$ | $6.0 \%$ | $4.4 \%$ | $4.9 \%$ | $6.1 \%$ |
| 1000 | $5.9 \%$ | $4.0 \%$ | $4.7 \%$ | $8.6 \%$ | $6.3 \%$ | $5.5 \%$ | $8.3 \%$ |
| 1100 | $7.2 \%$ | $6.4 \%$ | $6.9 \%$ | $9.5 \%$ | $8.6 \%$ | $5.8 \%$ | $9.0 \%$ |
| 1200 | $6.8 \%$ | $6.8 \%$ | $9.1 \%$ | $12.2 \%$ | $9.2 \%$ | $8.0 \%$ | $10.5 \%$ |
| 1300 | $5.8 \%$ | $8.0 \%$ | $10.4 \%$ | $14.0 \%$ | $10.3 \%$ | $8.1 \%$ | $9.9 \%$ |
| 1400 | $4.8 \%$ | $8.1 \%$ | $13.6 \%$ | $11.7 \%$ | $12.0 \%$ | $8.9 \%$ | $9.4 \%$ |
| 1500 | $4.7 \%$ | $7.0 \%$ | $13.6 \%$ | $12.1 \%$ | $10.5 \%$ | $9.8 \%$ | $8.7 \%$ |
| 1600 | $1.9 \%$ | $3.5 \%$ | $4.9 \%$ | $5.9 \%$ | $3.6 \%$ | $9.7 \%$ | $7.3 \%$ |
| 1700 | $4.5 \%$ | $7.3 \%$ | $7.8 \%$ | $9.7 \%$ | $6.6 \%$ | $5.5 \%$ | $3.5 \%$ |
| 1800 | $5.5 \%$ | $9.3 \%$ | $9.1 \%$ | $10.0 \%$ | $8.3 \%$ | $5.1 \%$ | $5.6 \%$ |
| 1900 | $5.6 \%$ | $11.1 \%$ | $8.8 \%$ | $9.4 \%$ | $8.3 \%$ | $5.9 \%$ | $6.9 \%$ |
| 2000 | $6.9 \%$ | $11.8 \%$ | $8.1 \%$ | $10.8 \%$ | $8.2 \%$ | $6.1 \%$ | $7.6 \%$ |
| 2100 | $6.4 \%$ | $12.8 \%$ | $11.8 \%$ | $16.0 \%$ | $8.7 \%$ | $6.1 \%$ | $7.2 \%$ |
| 2200 | $3.0 \%$ | $7.6 \%$ | $6.0 \%$ | $6.8 \%$ | $4.9 \%$ | $4.3 \%$ | $4.9 \%$ |
| 2300 | $4.4 \%$ | $7.4 \%$ | $7.8 \%$ | $7.6 \%$ | $6.9 \%$ | $4.3 \%$ | $5.0 \%$ |
|  |  |  |  |  |  |  | $6.8 \%$ |

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### 13.6.9 Southern District

Table Southern A: Most Frequent Calls for Service
District Dispatched Calls for Service: ${ }^{328} 112,934$
Number of Dispatched Calls in the Most Frequent Calls for Service List: 89,111
Percentage of Dispatched Calls that are in the Most Frequent Calls for Service List: 79 percent

| Dispatched Call Type | Number |
| :---: | :---: |
| 55 - DISORDERLY PERSON | 13612 |
| 4E - COMMON ASSAULT | 10565 |
| 89-911/NO VOICE CALL | 9669 |
| 79 - OTHER | 8505 |
| 870 - NARCOTICS OUTSIDE | 6305 |
| 5G - BURGLARY | 5652 |
| 49 - FAMILY DISTURBANCE | 4647 |
| 65 - SILENT ALARM | 4602 |
| 30 - ACCIDENT-AUTO | 3767 |
| 54 - ARMED PERSON | 2833 |
| 6 J - LARCENY- OTHER | 2723 |
| 57 - SUSPICIOUS PERSON | 2553 |
| 75 - DESTRUCT. OF PROPERTY | 2353 |
| 4D - AGG ASSAULT - HANDS | 2238 |
| 99-ACCIDENT-HIT \& RUN | 1937 |
| 7C - STOLEN VEH./OTHER | 1653 |
| 83- DISCHARGING FIREARM | 1584 |
| 6D - LARCENY- FROM AUTO | 1395 |
| 85 - BEHAVIORAL CRISIS | 1286 |
| 31 - ACCIDENT-PERSON INJ. | 1232 |

Table Southern B: Most Frequent Self-Initiated Activities
District Records Labeled Self-Initiated: ${ }^{329} 6,014$
Number of Activities in the Most Frequent Self-Initiated Activities List: 5,351
Percentage of Dispatched Calls that are in the Most Frequent Calls for Service List: 89 percent

[^86]| Dispatched Call Type | Number |
| :---: | :---: |
| 20D - DETAIL | 2443 |
| 25 - CAR STOP | 757 |
| FI - FIELD INTERVIEW | 510 |
| 61 - PERSON WANTED ON WAR | 306 |
| 20Z-OTHER | 186 |
| 79 - OTHER | 177 |
| 30 - ACCIDENT-AUTO | 124 |
| 4E - COMMON ASSAULT | 114 |
| 20F - WARRANT | 92 |
| 81 - RECOVERED PROPERTY | 92 |
| 55 - DISORDERLY PERSON | 75 |
| 6 J - LARCENY- OTHER | 73 |
| 83 - DISCHARGING FIREARM | 66 |
| 31 - ACCIDENT-PERSON INJ. | 62 |
| 60 - SICK PERSON | 53 |
| 20J - TRANSPORT | 50 |
| 75 - DESTRUCT. OF PROPERTY | 49 |
| 4A - AGG ASSAULT - GUN | 46 |
| 99 - ACCIDENT-HIT \& RUN | 40 |
| 7C - STOLEN VEH./OTHER | 36 |

Table Southern C: Calls for Service Time in Hours

| Hour | Sun | Mon | Tue | Wed | Thu | Fri | Sat |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0000 | 10.0 | 10.1 | 9.9 | 11.6 | 11.6 | 11.6 | 13.3 |
| 0100 | 14.0 | 9.1 | 8.6 | 9.9 | 10.1 | 10.3 | 12.2 |
| 0200 | 12.2 | 6.8 | 5.9 | - 7.4 | 7.5 | 8.5 | 11.6 |
| 0300 | 11.8 | 5.7 | 5.2 | 6.3 | 7.2 | 7.4 | 9.8 |
| 0400 | 9.0 | 5.3 | 5.3 | 5.7 | 6.2 | 6.4 | 8.8 |
| 0500 | 7.9 | 5.1 | 4.9 | 5.2 | 5.5 | 5.8 | 7.4 |
| 0600 | 6.8 | 5.6 | 5.6 | 6.1 | 5.8 | 6.0 | 7.2 |
| 0700 | 5.9 | 5.8 | 5.3 | 6.1 | 6.4 | 6.6 | 6.5 |
| 0800 | 5.9 | 6.6 | 6.7 | 6.9 | 7.4 | 8.2 | 7.1 |
| 0900 | 6.5 | 7.6 | 7.2 | 7.9 | 8.3 | 9.0 | 7.5 |
| 1000 | 7.2 | 7.6 | 7.9 | 9.1 | 8.3 | 9.3 | 8.5 |
| 1100 | 8.0 | 8.0 | 8.5 | 9.7 | 8.8 | 9.6 | 9.4 |
| 1200 | 8.6 | 8.7 | 9.0 | 9.6 | 8.9 | 10.1 | 9.9 |
| 1300 | 9.0 | 8.9 | 9.8 | 10.0 | 9.9 | 11.1 | 10.6 |
| 1400 | 8.9 | 8.7 | 9.0 | 9.9 | 9.3 | 10.5 | 10.3 |
| 1500 | 10.0 | 9.7 | 9.3 | 9.6 | 10.3 | 10.6 | 10.2 |
| 1600 | 9.0 | 8.3 | 7.9 | 8.5 | 9.2 | 11.5 | 10.2 |
| 1700 | 10.4 | 11.2 | 10.6 | 10.7 | 10.8 | 9.6 | 7.8 |

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| 1800 | 9.9 | 10.8 | 10.4 | 10.6 | 11.0 | 11.6 | 9.4 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 1900 | 9.4 | 10.3 | 10.8 | 10.3 | 10.2 | 10.9 | 9.0 |
| 2000 | 9.6 | 9.6 | 11.0 | 10.2 | 10.5 | 10.0 | 9.3 |
| 2100 | 9.8 | 9.8 | 10.0 | 9.7 | 10.5 | 9.8 | 10.1 |
| 2200 | 8.7 | 10.1 | 10.2 | 10.5 | 11.5 | 11.0 | 10.2 |
| 2300 | 10.5 | 10.6 | 12.4 | 12.2 | 12.5 | 13.7 | 12.2 |
|  |  |  |  |  |  |  | 1507.4 |

Table Southern D: Staffing Weekly Hours

| Hour | Sun | Mon | Tue | Wed | Fri |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 0000 | 21 | 18 | 31 | 26 | 21 | 27 | 26 |
| 0100 | 21 | 18 | 31 | 26 | 21 | 27 | 26 |
| 0200 | 21 | 9 | 13 | 13 | 13 | 13 | 26 |
| 0300 | 13 | 9 | 13 | 13 | 13 | 13 | 13 |
| 0400 | 13 | 9 | 13 | 13 | 13 | 13 | 13 |
| 0500 | 13 | 9 | 13 | 13 | 13 | 13 | 13 |
| 0600 | 13 | 9 | 13 | 13 | 13 | 13 | 13 |
| 0700 | 26 | 22 | 27 | 29 | 29 | 29 | 28 |
| 0800 | 13 | 13 | 14 | 16 | 16 | 16 | 15 |
| 0900 | 13 | 13 | 14 | 16 | 16 | 16 | 15 |
| 1000 | 13 | 13 | 14 | 16 | 16 | 16 | 15 |
| 1100 | 13 | 13 | 14 | 16 | 16 | 16 | 15 |
| 1200 | 13 | 10 | 14 | 13 | 16 | 15 | 13 |
| 1300 | 13 | 10 | 14 | 13 | 16 | 15 | 13 |
| 1400 | 13 | 10 | 14 | 13 | 16 | 15 | 13 |
| 1500 | 13 | 10 | 14 | 13 | 16 | 15 | 13 |
| 1600 | 26 | 28 | 27 | 27 | 30 | 15 | 13 |
| 1700 | 13 | 18 | 13 | 14 | 14 | 13 | 11 |
| 1800 | 13 | 18 | 13 | 14 | 14 | 13 | 11 |
| 1900 | 13 | 18 | 13 | 14 | 14 | 13 | 11 |
| 2000 | 13 | 18 | 13 | 14 | 14 | 13 | 11 |
| 2100 | 7 | 18 | 13 | 8 | 14 | 13 | 11 |
| 2200 | 18 | 31 | 26 | 21 | 27 | 26 | 21 |
| 2300 | 18 | 31 | 26 | 21 | 27 | 26 | 21 |
|  |  |  |  |  |  |  | 2748 |

Table Southern E: Average Patrol Time Consumed by Calls for Service

| Hour | Sun | Mon | Tue | Wed | Thu | Fri | Sat |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 0000 | $47.8 \%$ | $56.1 \%$ | $31.9 \%$ | $44.5 \%$ | $55.4 \%$ | $43.1 \%$ | $51.0 \%$ |
| 0100 | $66.7 \%$ | $50.7 \%$ | $27.7 \%$ | $38.2 \%$ | $48.2 \%$ | $38.0 \%$ | $47.1 \%$ |
| 0200 | $58.1 \%$ | $75.4 \%$ | $45.0 \%$ | $57.1 \%$ | $57.4 \%$ | $65.4 \%$ | $44.6 \%$ |
| 0300 | $90.8 \%$ | $63.5 \%$ | $39.7 \%$ | $48.6 \%$ | $55.1 \%$ | $56.9 \%$ | $75.4 \%$ |
| 0400 | $68.8 \%$ | $59.1 \%$ | $40.5 \%$ | $43.5 \%$ | $47.9 \%$ | $48.8 \%$ | $67.4 \%$ |
| 0500 | $60.9 \%$ | $56.9 \%$ | $37.7 \%$ | $40.0 \%$ | $42.6 \%$ | $44.6 \%$ | $57.1 \%$ |
| 0600 | $52.6 \%$ | $62.4 \%$ | $42.8 \%$ | $46.5 \%$ | $44.5 \%$ | $45.8 \%$ | $55.1 \%$ |

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| 0700 | $22.6 \%$ | $26.2 \%$ | $19.8 \%$ | $20.9 \%$ | $22.2 \%$ | $22.8 \%$ | $23.0 \%$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 0800 | $45.0 \%$ | $50.9 \%$ | $47.7 \%$ | $43.2 \%$ | $46.3 \%$ | $51.3 \%$ | $47.1 \%$ |
| 0900 | $49.7 \%$ | $58.2 \%$ | $51.1 \%$ | $49.4 \%$ | $51.8 \%$ | $56.3 \%$ | $49.9 \%$ |
| 1000 | $55.5 \%$ | $58.2 \%$ | $56.2 \%$ | $56.7 \%$ | $51.7 \%$ | $58.2 \%$ | $56.4 \%$ |
| 1100 | $61.4 \%$ | $61.5 \%$ | $61.0 \%$ | $60.8 \%$ | $54.8 \%$ | $60.1 \%$ | $62.9 \%$ |
| 1200 | $66.2 \%$ | $86.5 \%$ | $64.3 \%$ | $73.5 \%$ | $55.7 \%$ | $67.4 \%$ | $75.9 \%$ |
| 1300 | $69.5 \%$ | $88.8 \%$ | $69.9 \%$ | $76.9 \%$ | $62.0 \%$ | $73.9 \%$ | $81.2 \%$ |
| 1400 | $68.2 \%$ | $86.8 \%$ | $64.0 \%$ | $76.0 \%$ | $57.8 \%$ | $70.2 \%$ | $79.0 \%$ |
| 1500 | $77.1 \%$ | $96.7 \%$ | $66.4 \%$ | $73.8 \%$ | $64.2 \%$ | $70.9 \%$ | $78.6 \%$ |
| 1600 | $34.5 \%$ | $29.5 \%$ | $29.2 \%$ | $31.3 \%$ | $30.7 \%$ | $76.6 \%$ | $78.1 \%$ |
| 1700 | $79.6 \%$ | $61.9 \%$ | $81.3 \%$ | $76.2 \%$ | $77.4 \%$ | $73.7 \%$ | $70.5 \%$ |
| 1800 | $76.0 \%$ | $59.7 \%$ | $79.6 \%$ | $76.0 \%$ | $78.6 \%$ | $89.1 \%$ | $85.6 \%$ |
| 1900 | $72.6 \%$ | $57.3 \%$ | $82.8 \%$ | $73.2 \%$ | $73.1 \%$ | $83.6 \%$ | $81.8 \%$ |
| 2000 | $73.6 \%$ | $53.1 \%$ | $84.5 \%$ | $72.9 \%$ | $74.6 \%$ | $77.2 \%$ | $84.2 \%$ |
| 2100 | $140.2 \%$ | $54.4 \%$ | $76.9 \%$ | $121.5 \%$ | $74.6 \%$ | $75.1 \%$ | $91.4 \%$ |
| 2200 | $48.2 \%$ | $32.5 \%$ | $39.2 \%$ | $50.0 \%$ | $42.5 \%$ | $42.1 \%$ | $48.7 \%$ |
| 2300 | $58.2 \%$ | $34.1 \%$ | $47.6 \%$ | $58.1 \%$ | $46.2 \%$ | $52.8 \%$ | $57.9 \%$ |
|  |  |  |  |  |  |  | $59.3 \%$ |

Table Southern F: Average Patrol Time Consumed by Self-Initiated Activities

| Hour | lun | Mon | Tue | Wed | Thu | Fri | Sat |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 0000 | $8.3 \%$ | $10.3 \%$ | $6.1 \%$ | $9.0 \%$ | $7.9 \%$ | $10.1 \%$ | $10.3 \%$ |
| 0100 | $10.0 \%$ | $9.2 \%$ | $4.5 \%$ | $9.7 \%$ | $8.2 \%$ | $9.4 \%$ | $12.6 \%$ |
| 0200 | $11.1 \%$ | $12.0 \%$ | $9.0 \%$ | $14.6 \%$ | $11.0 \%$ | $13.1 \%$ | $12.8 \%$ |
| 0300 | $15.6 \%$ | $9.8 \%$ | $8.5 \%$ | $12.7 \%$ | $10.8 \%$ | $14.5 \%$ | $17.1 \%$ |
| 0400 | $12.6 \%$ | $8.9 \%$ | $6.8 \%$ | $8.3 \%$ | $11.2 \%$ | $14.0 \%$ | $13.2 \%$ |
| 0500 | $9.2 \%$ | $8.7 \%$ | $5.9 \%$ | $5.6 \%$ | $9.9 \%$ | $10.5 \%$ | $10.5 \%$ |
| 0600 | $6.4 \%$ | $7.4 \%$ | $4.6 \%$ | $4.9 \%$ | $7.9 \%$ | $8.7 \%$ | $9.0 \%$ |
| 0700 | $2.2 \%$ | $2.0 \%$ | $1.9 \%$ | $2.4 \%$ | $2.4 \%$ | $3.2 \%$ | $2.8 \%$ |
| 0800 | $3.2 \%$ | $3.1 \%$ | $3.0 \%$ | $4.2 \%$ | $2.2 \%$ | $4.4 \%$ | $2.9 \%$ |
| 0900 | $3.1 \%$ | $4.1 \%$ | $3.3 \%$ | $5.0 \%$ | $4.1 \%$ | $4.5 \%$ | $4.6 \%$ |
| 1000 | $4.0 \%$ | $4.2 \%$ | $5.1 \%$ | $6.8 \%$ | $6.1 \%$ | $4.8 \%$ | $5.9 \%$ |
| 1100 | $6.7 \%$ | $5.4 \%$ | $6.7 \%$ | $8.5 \%$ | $6.0 \%$ | $6.1 \%$ | $7.0 \%$ |
| 1200 | $8.3 \%$ | $8.3 \%$ | $8.3 \%$ | $9.5 \%$ | $6.6 \%$ | $7.8 \%$ | $8.6 \%$ |
| 1300 | $9.6 \%$ | $10.0 \%$ | $9.2 \%$ | $10.5 \%$ | $7.7 \%$ | $8.9 \%$ | $8.6 \%$ |
| 1400 | $9.9 \%$ | $8.5 \%$ | $9.4 \%$ | $10.0 \%$ | $7.8 \%$ | $7.1 \%$ | $7.7 \%$ |
| 1500 | $9.6 \%$ | $8.8 \%$ | $9.8 \%$ | $10.0 \%$ | $7.6 \%$ | $8.2 \%$ | $6.5 \%$ |
| 1600 | $4.0 \%$ | $2.7 \%$ | $3.8 \%$ | $4.0 \%$ | $3.2 \%$ | $8.8 \%$ | $7.4 \%$ |
| 1700 | $7.9 \%$ | $4.1 \%$ | $4.5 \%$ | $6.3 \%$ | $6.9 \%$ | $7.9 \%$ | $7.1 \%$ |
| 1800 | $7.7 \%$ | $6.1 \%$ | $5.3 \%$ | $6.8 \%$ | $8.1 \%$ | $6.3 \%$ | $5.8 \%$ |
| 1900 | $10.4 \%$ | $6.0 \%$ | $7.9 \%$ | $7.9 \%$ | $7.3 \%$ | $7.4 \%$ | $6.5 \%$ |
| 2000 | $10.9 \%$ | $6.8 \%$ | $9.1 \%$ | $6.5 \%$ | $6.8 \%$ | $9.6 \%$ | $7.4 \%$ |
| 2100 | $18.8 \%$ | $6.8 \%$ | $11.7 \%$ | $12.1 \%$ | $6.4 \%$ | $8.3 \%$ | $9.2 \%$ |
| 2200 | $8.0 \%$ | $4.5 \%$ | $7.1 \%$ | $5.6 \%$ | $5.8 \%$ | $5.8 \%$ | $7.7 \%$ |
| 2300 | $9.9 \%$ | $6.1 \%$ | $7.9 \%$ | $6.3 \%$ | $8.1 \%$ | $7.5 \%$ | $9.1 \%$ |
|  |  |  |  |  |  |  | $7.6 \%$ |

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### 13.7 Workload Analysis Source Data Tables

### 13.7.1 Patrol Analysis

Table 31: Priority 911 Calls for Service Percentages by District

| District | Priority 1 | Priority 2 | Priority 3 | Priority 4 | Other <br> Priority | Total Calls |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Central | $13.6 \%$ | $58.3 \%$ | $24.0 \%$ | $3.2 \%$ | $0.9 \%$ | 123,061 |
| Southeastern | $17.5 \%$ | $52.6 \%$ | $23.2 \%$ | $5.9 \%$ | $0.8 \%$ | 119,090 |
| Eastern | $16.6 \%$ | $58.0 \%$ | $20.7 \%$ | $3.6 \%$ | $1.0 \%$ | 109,461 |
| Northeastern | $15.6 \%$ | $56.2 \%$ | $22.3 \%$ | $5.0 \%$ | $0.9 \%$ | 164,940 |
| Northern | $17.1 \%$ | $52.7 \%$ | $24.5 \%$ | $4.7 \%$ | $1.0 \%$ | 124,340 |
| Northwestern | $15.6 \%$ | $58.5 \%$ | $20.7 \%$ | $4.3 \%$ | $0.9 \%$ | 114,996 |
| Western | $15.4 \%$ | $62.0 \%$ | $18.5 \%$ | $3.3 \%$ | $0.8 \%$ | 104,634 |
| Southwestern | $15.6 \%$ | $58.4 \%$ | $20.6 \%$ | $4.6 \%$ | $0.9 \%$ | 116,160 |
| Southern | $16.6 \%$ | $57.1 \%$ | $20.8 \%$ | $4.5 \%$ | $1.1 \%$ | $\mathbf{1 2 3 , 7 0 4}$ |
| Citywide | $\mathbf{1 5 . 9 \%}$ | $\mathbf{5 6 . 9 \%}$ | $\mathbf{2 1 . 8 \%}$ | $\mathbf{4 . 4 \%}$ | $\mathbf{0 . 9 \%}$ | $\mathbf{1 , 1 0 0 , 3 8 6}$ |

Note: The citywide total does not include records that either had a blank field or some designation other than one of the districts; thus, it does not match the total number of 911 calls for service as displayed in Table 10. Source: BPD Computer Aided Dispatch data, July 1, 2016-June 30, 2017.

Table 31 displays the 911 Call for Service percentages by priority and district. Citywide ratios correspond to Figure 7 in Chapter 4.2. As noted, the data shows call priority ratios by district as very similar to the citywide ratios.

Table 32: Summary Averages of the Staffing Analysis

|  | Staff <br> Hours per <br> Week | CFS <br> Hours <br> Per <br> Week | Average CFS <br> Percentage <br> Time <br> Consumed | SI Hours per Week | Average SI <br> Percentage <br> time <br> Consumed | Detail <br> Hours per <br> Week | Average <br> Detail <br> Percentage <br> Time <br> Consumed | Average <br> Total <br> Percentage <br> Time <br> Consumed |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Average of the nine districts | 2,889 | 1,484.8 | $55.6 \%$ | 194.6 | 7.2\% | 82.8 | 2.9\% | 65.6\% |

Table 32 displays a summary of averages of the data displayed in Table 13: Summary of BPD District Staffing Analysis. Displaying the averages, it should not be taken as a citywide calculation. Additionally, as noted in Chapter 4.3, the averages in Table 13 are average estimates; available time for self-initiated activities and community oriented policing activities fluctuate significantly over the course of a shift, therefore averages do not necessarily accurately capture the amount of time spent.

Table 33: Patrol Leave Breakdown by District

|  | Sector Patrol Only |  |  |  |  | All Sworn Officers Assigned to Patrol |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| District | n | Total Leave Taken | Average <br> Leave <br> Hours per <br> Officer in 2017 | Percentage of Leave Taken in the Year | Average <br> Rate <br> Available <br> for <br> Patrol <br> Duties of Sector | n | Total Leave Taken | Average <br> Leave <br> Hours per <br> Officer in 2017 | Percentage of Leave Taken in the Year | Average Rate Available for Patrol Duties of Sector |
| Central | 58 | 28724.9 | 495.256897 | 23.8\% | 76.2\% | 105 | 49684.15 | 473.182381 | 22.7\% | 77.3\% |
| Vacation |  | 7704.16667 | 132.83046 | 6.4\% |  |  | 14670.75 | 139.721429 | 6.7\% |  |
| Medical/Sick |  | 6756.15 | 116.485345 | 5.6\% |  |  | 8170.73333 | 77.8165079 | 3.7\% |  |
| Holiday |  | 7202.08333 | 124.173851 | 6.0\% |  |  | 11943.75 | 113.75 | 5.5\% |  |
| Training |  | 5339.58333 | 92.0617816 | 4.4\% |  |  | 10118.75 | 96.3690476 | 4.6\% |  |
| Other |  | 1722.91667 | 29.7054598 | 1.4\% |  |  | 4780.16667 | 45.5253968 | 2.2\% |  |
| Eastern* | 63 | 25479.1667 | 404.431217 | 19.4\% | 80.6\% | 82 | 32774.8333 | 399.693089 | 19.2\% | 80.8\% |
| Vacation |  | 9102.08333 | 144.477513 | 6.9\% |  |  | 11664.4167 | 142.248984 | 6.8\% |  |
| Medical/Sick |  | 5079.16667 | 80.6216931 | 3.9\% |  |  | 5875 | 71.6463415 | 3.4\% |  |
| Holiday |  | 7020.83333 | 111.441799 | 5.4\% |  |  | 8845.83333 | 107.876016 | 5.2\% |  |
| Training* |  | 893.75 | 14.1865079 | 0.7\% |  |  | 1841.66667 | 22.4593496 | 1.1\% |  |
| Other |  | 3383.33333 | 53.7037037 | 2.6\% |  |  | 4547.91667 | 55.4623984 | 2.7\% |  |
| Northeastern | 82 | 41584.15 | 507.12378 | 24.4\% | 75.6\% | 103 | 50320.4 | 488.547573 | 23.5\% | 76.5\% |
| Vacation |  | 11185.15 | 136.404268 | 6.6\% |  |  | 13545.5667 | 131.510356 | 6.3\% |  |
| Medical/Sick |  | 9534.16667 | 116.270325 | 5.6\% |  |  | 12073.75 | 117.220874 | 5.6\% |  |
| Holiday |  | 8943.75 | 109.070122 | 5.2\% |  |  | 10737.5 | 104.247573 | 5.0\% |  |
| Training |  | 8216.66667 | 100.203252 | 4.8\% |  |  | 9868.75 | 95.8131068 | 4.6\% |  |
| Other |  | 3704.41667 | 45.175813 | 2.2\% |  |  | 4094.83333 | 39.7556634 | 1.9\% |  |
| Northern | 62 | 36215.5667 | 584.122043 | 28.1\% | 71.9\% | 92 | 53126.4833 | 577.461775 | 27.8\% | 72.2\% |
| Vacation |  | 10981.25 | 177.116935 | 8.5\% |  |  | 15920.8333 | 173.052536 | 8.3\% |  |
| Medical/Sick |  | 5114.58333 | 82.4932796 | 4.0\% |  |  | 10977.0833 | 119.316123 | 5.7\% |  |
| Holiday |  | 7845.83333 | 126.545699 | 6.1\% |  |  | 10693.75 | 116.236413 | 5.6\% |  |
| Training |  | 7543.75 | 121.673387 | 5.8\% |  |  | 10210.4167 | 110.98279 | 5.3\% |  |
| Other |  | 4730.15 | 76.2927419 | 3.7\% |  |  | 5324.4 | 57.873913 | 2.8\% |  |
| Northwestern* | 71 | 31877.0833 | 448.973005 | 21.6\% | 78.4\% | 95 | 41622.25 | 438.128947 | 21.1\% | 78.9\% |
| Vacation |  | 10595.8333 | 149.237089 | 7.2\% |  |  | 13001.0833 | 136.853509 | 6.6\% |  |
| Medical/Sick |  | 10375 | 146.126761 | 7.0\% |  |  | 14445.8333 | 152.061404 | 7.3\% |  |
| Holiday |  | 8700 | 122.535211 | 5.9\% |  |  | 10852.0833 | 114.232456 | 5.5\% |  |
| Training* |  |  | 0 | 0.0\% |  |  |  | 0 | 0.0\% |  |
| Other |  | 2206.25 | 31.0739437 | 1.5\% |  |  | 3323.25 | 34.9815789 | 1.7\% |  |
| Southeastern | 55 | 33362.5 | 606.590909 | 29.2\% | 70.8\% | 84 | 51592.25 | 614.193452 | 29.5\% | 70.5\% |
| Vacation |  | 9562.5 | 173.863636 | 8.4\% |  |  | 13783.3333 | 164.087302 | 7.9\% |  |
| Medical/Sick |  | 8388.33333 | 152.515152 | 7.3\% |  |  | 15396.6667 | 183.293651 | 8.8\% |  |
| Holiday |  | 8447.91667 | 153.598485 | 7.4\% |  |  | 11672.9167 | 138.963294 | 6.7\% |  |
| Training |  | 5270.83333 | 95.8333333 | 4.6\% |  |  | 7745.83333 | 92.2123016 | 4.4\% |  |
| Other |  | 1692.91667 | 30.780303 | 1.5\% |  |  | 2993.5 | 35.6369048 | 1.7\% |  |
| Southern | 58 | 30293.75 | 522.306034 | 25.1\% | 74.9\% | 73 | 41377.6667 | 566.817352 | 27.3\% | 72.7\% |
| Vacation |  | 7772.91667 | 134.015805 | 6.4\% |  |  | 9778.83333 | 133.956621 | 6.4\% |  |
| Medical/Sick |  | 5250 | 90.5172414 | 4.4\% |  |  | 10750 | 147.260274 | 7.1\% |  |
| Holiday |  | 6700 | 115.517241 | 5.6\% |  |  | 8060.41667 | 110.416667 | 5.3\% |  |
| Training |  | 6445.83333 | 111.135057 | 5.3\% |  |  | 7481.25 | 102.482877 | 4.9\% |  |
| Other |  | 4125 | 71.1206897 | 3.4\% |  |  | 5307.16667 | 72.7009132 | 3.5\% |  |
| Southwestern | 52 | 28490.6167 | 547.896474 | 26.3\% | 73.7\% | 74 | 39269.7833 | 530.672748 | 25.5\% | 74.5\% |
| Vacation |  | 6664.58333 | 128.165064 | 6.2\% |  |  | 9006.25 | 121.706081 | 5.9\% |  |
| Medical/Sick |  | 6664.58333 | 128.165064 | 6.2\% |  |  | 8772.91667 | 118.552928 | 5.7\% |  |
| Holiday |  | 7008.33333 | 134.775641 | 6.5\% |  |  | 9441.66667 | 127.59009 | 6.1\% |  |
| Training |  | 5389.58333 | 103.645833 | 5.0\% |  |  | 7339.58333 | 99.1835586 | 4.8\% |  |
| Other |  | 2763.53333 | 53.1448718 | 2.6\% |  |  | 4709.36667 | 63.6400901 | 3.1\% |  |

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| Western | $\mathbf{6 4}$ | $\mathbf{2 9 7 0 3 . 1 1 6 7}$ | $\mathbf{4 6 4 . 1 1 1 1 9 8}$ | $\mathbf{2 2 . 3} \%$ | $\mathbf{7 7 . 7 \%}$ | $\mathbf{7 5}$ | $\mathbf{3 3 5 4 4 . 9 5}$ | $\mathbf{4 4 7 . 2 6 6}$ | $\mathbf{2 1 . 5 \%}$ | $\mathbf{7 8 . 5 \%}$ |
| :---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Vacation |  | 8328.11667 | 130.126823 | $6.3 \%$ |  |  | 9669.78333 | 128.930444 | $6.2 \%$ |  |
| Medical/Sick |  | 4750 | 74.21875 | $3.6 \%$ |  | 5000 | 66.6666667 | $3.2 \%$ |  |  |
| Holiday |  | 7250 | 113.28125 | $5.4 \%$ |  |  | 8141.66667 | 108.555556 | $5.2 \%$ |  |
| Training |  | 7468.75 | 116.699219 | $5.6 \%$ |  | 8352.08333 | 111.361111 | $5.4 \%$ |  |  |
| Other |  | 1906.25 | 29.7851563 | $1.4 \%$ |  | 2381.41667 | 31.7522222 | $1.5 \%$ |  |  |
| Total* | $\mathbf{5 6 5}$ | $\mathbf{2 8 5 7 3 0 . 8 5}$ | $\mathbf{5 0 5 . 7 1 8 3 1 9}$ | $\mathbf{2 4 . 3 \%}$ | $\mathbf{7 5 . 7 \%}$ | $\mathbf{7 8 3}$ | $\mathbf{3 9 3 3 1 2 . 7 6 7}$ | $\mathbf{5 0 2 . 3 1 5 1 5 5}$ | $\mathbf{2 4 . 1 \%}$ | $\mathbf{7 5 . 9 \%}$ |
| Vacation |  | 81896.6 | 144.949735 | $7.0 \%$ |  |  | 111040.85 | 141.814623 | $6.8 \%$ |  |
| Medical/Sick |  | 61911.9833 | 109.578732 | $5.3 \%$ |  | 91461.9833 | 116.809685 | $5.6 \%$ |  |  |
| Holiday |  | 69118.75 | 122.334071 | $5.9 \%$ |  |  | 90389.5833 | 115.440081 | $5.6 \%$ |  |
| Training* |  | 46568.75 | 82.4225664 | $4.0 \%$ |  |  | 62958.3333 | 80.406556 | $3.9 \%$ |  |
| Other |  | 26234.7667 | 46.4332153 | $2.2 \%$ |  |  | 37462.0167 | 47.8442103 | $2.3 \%$ |  |

*Note: Eastern and Northwestern District display low percentages of officers attending in-service training in 2017. These figures, and the total, were supplemented with a base average of 80 hours of training per officer in the recommended patrol staffing requirements calculations displayed in Table 14 of the Patrol Analysis chapter. Only officers assigned to the district for the full year, counted as officers who were assigned to the district in January and December of 2017, were included in this analysis.
Sources: BPD payroll leave data, January 1, 2017-December 31, 2017, and lists of officers and their rank who were assigned to each district in January 2017 and December 2017.

Table 33 displays the breakdown of leave types taken by officers assigned to each district's sector patrol and to each district's patrol generally. The data shows similar leave percentages and resulting average rate available for patrol duties for officers only assigned to sector patrol and officers assigned to the patrol district in general. This leave breakdown can provide each district and the department with an informed sense of the types and amount of leave that officers are taking. For example, the data shows officers in certain districts did not record attending in-service training in 2017. ${ }^{330}$

### 13.7.2 Investigations Analysis

Table 34: Investigations Leave Breakdown by Unit

|  | Investigations Detectives Full Year Only |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Unit | n | Total Leave Taken | Average Leave Hours per Detective in 2017 | Percentage of Leave Taken in the Year | Average Rate Available for Investigative Duties of Detectives |
| Homicide | 47 | 18556.1667 | 394.812057 | 19.0\% | 81.0\% |
| Vacation |  | 8737.66667 | 185.907801 | 8.9\% |  |
| Sick |  | 100 | 2.12765957 | 0.1\% |  |
| Holiday |  | 4616.66667 | 98.2269504 | 4.7\% |  |
| Training |  | 4158.33333 | 88.4751773 | 4.3\% |  |
| Other |  | 943.5 | 20.0744681 | 1.0\% |  |
| Citywide Shootings | 12 | 4475 | 372.916667 | 17.9\% | 82.1\% |
| Vacation |  | 1900 | 158.333333 | 7.6\% |  |
| Sick |  | 75 | 6.25 | 0.3\% |  |
| Holiday |  | 1075 | 89.5833333 | 4.3\% |  |
| Training |  | 916.666667 | 76.3888889 | 3.7\% |  |

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| Other |  | 508.333333 | 42.3611111 | 2.0\% |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Arson | 1 | 800 | 800 | 38.5\% | 61.5\% |
| Vacation |  | 166.666667 | 166.666667 | 8.0\% |  |
| Sick |  | 541.666667 | 541.666667 | 26.0\% |  |
| Holiday |  | 41.6666667 | 41.6666667 | 2.0\% |  |
| Training |  | 50 | 50 | 2.4\% |  |
| Other |  |  | 0 | 0.0\% |  |
| Economic Crimes | 3 | 1200 | 400 | 19.2\% | 80.8\% |
| Vacation |  | 616.666667 | 205.555556 | 9.9\% |  |
| Sick |  |  | 0 | 0.0\% |  |
| Holiday |  | 258.333333 | 86.1111111 | 4.1\% | , |
| Training |  | 208.333333 | 69.4444444 | 3.3\% | $\cdots$ |
| Other |  | 116.666667 | 38.8888889 | 1.9\% |  |
| Family Crimes (Domestic Violence/Elder Abuse) | 5 | 2941.66667 | 588.333333 | 28.3\% | 71.7\% |
| Vacation |  | 950 | 190 | 9.1\% |  |
| Sick |  | 133.333333 | 26.6666667 | 1.3\% |  |
| Holiday |  | 541.666667 | 108.333333 | 5.2\% |  |
| Training |  | 816.666667 | 163.333333 | 7.9\% |  |
| Other |  | 500 | 100 | 4.8\% |  |
| Missing Persons | 4 | 1749.75 | 437.4375 | 21.0\% | 79.0\% |
| Vacation |  | 649.916667 | 162.479167 | 7.8\% |  |
| Sick |  |  | 0 | 0.0\% |  |
| Holiday |  | 416.666667 | 104.166667 | 5.0\% |  |
| Training |  | 516.666667 | 129.166667 | 6.2\% |  |
| Other |  | 166.5 | 41.625 | 2.0\% |  |
| Sex Offense | 11 | 4600 | 418.181818 | 20.1\% | 79.9\% |
| Vacation |  | 2133.33333 | 193.939394 | 9.3\% |  |
| Sick |  | 8.33333333 | 0.75757576 | 0.0\% |  |
| Holiday |  | 1016.66667 | 92.4242424 | 4.4\% |  |
| Training |  | 1075 | 97.7272727 | 4.7\% |  |
| Other |  | 366.666667 | 33.3333333 | 1.6\% |  |
| Child Abuse | 15 | 7332.83333 | 488.855556 | 23.5\% | 76.5\% |
| Vacation |  | 3132.33333 | 208.822222 | 10.0\% |  |
| Sick |  | 91.6666667 | 6.11111111 | 0.3\% |  |
| Holiday |  | 1516.66667 | 101.111111 | 4.9\% |  |
| Training |  | 2008.33333 | 133.888889 | 6.4\% |  |
| Other |  | 583.833333 | 38.9222222 | 1.9\% |  |
| Citywide Robbery | 11 | 4091.66667 | 371.969697 | 17.9\% | 82.1\% |
| Vacation |  | 1508.33333 | 137.121212 | 6.6\% |  |
| Sick |  | 91.6666667 | 8.33333333 | 0.4\% |  |
| Holiday |  | 891.666667 | 81.0606061 | 3.9\% |  |
| Training |  | 1266.66667 | 115.151515 | 5.5\% |  |
| Other |  | 333.333333 | 30.3030303 | 1.5\% |  |
| District Detectives (Burglary) | 25 | 11772.5667 | 470.902667 | 22.6\% | 77.4\% |
| Vacation |  | 4578.9 | 183.156 | 8.8\% |  |
| Sick |  | 1575 | 63 | 3.0\% |  |
| Holiday |  | 2316.66667 | 92.6666667 | 4.5\% |  |
| Training |  | 1541.66667 | 61.6666667 | 3.0\% |  |
| Other |  | 1760.33333 | 70.4133333 | 3.4\% |  |
| Total | 134 | 57519.65 | 429.251119 | 20.6\% | 79.4\% |
| Vacation |  | 24373.8167 | 181.894154 | 8.7\% |  |
| Sick |  | 2616.66667 | 19.5273632 | 0.9\% |  |
| Holiday |  | 12691.6667 | 94.7139303 | 4.6\% |  |
| Training |  | 12558.3333 | 93.7189055 | 4.5\% |  |

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Other $\quad 1 \quad 5279.16667$ 39.3967662 $\quad 1.9 \%$

Note: Only detectives assigned to the section for the full year, counted as detectives who were assigned to the section/unit in January and December of 2017, were included in this analysis. As Citywide Shootings was not an existing section in January 2017 but their detectives were generally part of the District Detective Section, detectives were counted if they were assigned to the District Detective Section in January 2017 and Citywide Shootings in December 2017.
Sources: BPD payroll leave data, January 1, 2017-December 31, 2017, and lists of officers and their rank who were assigned to each section/unit in January 2017 and December 2017.

Table 34 displays the breakdown of leave types taken by detectives assigned to each BPD investigative unit. The leave breakdown can provide each section and the department with an informed sense of the types and amount of leave that detectives are taking, although it should be noted that smaller units may display less accurate leave percentages due to the smaller number of detectives used in calculating averages. For example, as the Arson rate of time available for investigative duties of detectives was based on one detective, it likely cannot be used to generalize the rate for the unit, whereas Homicide, based on 47 detectives, is likely more accurate.


### 13.8 Baltimore Police Customer Service Survey

The Baltimore Police Department respectfully requests your feedback on the customer service levels that you receive. Your survey responses will represent the baseline for customer service feedback in anticipation of changes to occur within BPD under Commissioner De Sousa.

Responses are anonymous and the survey should only take a few minutes.

Thank you in advance for your participation.

## Police Service Expectations

1. What is your expectation of the time it should take for the 911 phone line to be answered?

- 0-20 seconds
- 21-40 seconds
- 41-60 seconds

What is your expectation of the time it should take for the 911 phone lines to be answered?
(400 responses).

■ 0-20 Seconds - 21-40 Seconds 41-60 Seconds
2. What is your expectation of the time it should take for the BPD to respond to serious crimes, like shootings, aggravated assaults or robbery?

- Under 5 minutes
- 5-10 minutes
- 10-15 minutes

What is your expectation of the time it should take for the BPD to respond to serious crimes, like shootings, aggravated assaults, or robbery?
(400 responses).
1.2\%


■ Under 5 Minutes ■ 5-10 Minutes ■ 10-15 Minutes
3. What is your expectation of the time it should take for the BPD to respond to calls such as neighbor/family disputes, missing persons, suspicious person, or drug activity?

- Under 10 minutes
- 10-20 minutes
- 21-25 minutes

What is your expectation of the time it should take for the BPD to respond to calls such as neighbor/family disputes, missing persons, suspicious persons, or drug activity? (400 responses).


- Under 10 Minutes - 10-20 Minutes - 21-25 Minutes

4. What is your expectation of the time it should take for the BPD to respond to calls such as destruction of property, larceny, or auto theft?

- Under 15 minutes
- 16-25 minutes
- 26-35 minutes

What is your expectation of the time it should take for the BPD to respond to calls such as destruction of property, larceny, or auto theft?
(400 responses).


■ Under 15 Minutes ■ 16-25 Minutes $\quad$ 26-35 Minutes

## Filing a Police Report

5. With the following types of calls, what method would you prefer to use to file a police report? Please rank the following reporting methods on a scale of 1 to 4 , with " 1 being the Most Preferable option.

Residential Burglary

|  | 1. Most <br> Preferable | 2. Preferable | 3. Less <br> Preferable | 4. Least <br> Preferable |
| :--- | :--- | :--- | :--- | :--- |
| Officer <br> Responds for <br> Report |  |  |  |  |
| File a Report <br> at Police HQ <br> or District <br> Office |  |  |  |  |
| File a Report <br> Over the <br> Phone |  |  |  |  |
| File a Report <br> Online |  |  |  |  |

Residential Burglary


## Business Burglary

|  | 1. Most <br> Preferable | 2. Preferable | 3. Less <br> Preferable | 4. Least <br> Preferable |
| :--- | :--- | :--- | :--- | :--- |
| Officer <br> Responds for <br> Report |  |  |  |  |
| File a Report <br> at Police HQ <br> or District <br> Office |  |  |  |  |
| File a Report <br> Over the <br> Phone |  |  |  |  |
| File a Report <br> Online |  |  |  |  |

Business Burglary


## Car Break-In

|  | 1. Most <br> Preferable | 2. Preferable | 3. Less <br> Preferable | 4. Least <br> Preferable |
| :--- | :--- | :--- | :--- | :--- |
| Officer <br> Responds for <br> Report |  |  |  |  |


| File a Report <br> at Police HQ <br> or District <br> Office |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| File a Report <br> Over the <br> Phone |  |  |  |  |
| File a Report <br> Online |  |  |  |  |

Car Break-In


Simple Assaults

|  | 1. Most <br> Preferable | 2. Preferable | 3. Less <br> Preferable | 4. Least <br> Preferable |
| :--- | :--- | :--- | :--- | :--- |
| Officer <br> Responds for <br> Report |  |  |  |  |
| File a Report <br> at Police HQ <br> or District <br> Office |  |  |  |  |
| File a Report <br> Over the <br> Phone |  |  |  |  |


| File a Report <br> Online |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |

Simple Assaults

6. After you have filed a property crime report, would you like to receive notification of receipt and status of your case?

- Yes
- No

After you have filed a property crime report, would you like to receive notification of receipt and status of your case?
(398 responses).


$$
■ \text { Yes } \quad \text { No }
$$

7. If so, how would you like to receive notification of receipt and status of your case?

- Do Not Need Notification
- By Telephone
- By Email
- By US mail

If so, how would you like to receive notification of receipt and status of your case?
(398 responses).


■ Do Not Need Notification ■ By Telephone ■ By Email By US Mail
8. Currently, it can take up to 10 business days (and $\$ 10$ ) from time of request to obtain a copy of a crime report. Upon your request as a victim, how long do you think it should it take the Police Department to provide you with a copy of your crime report?

- 2 business days
- 1 week
- 2 weeks
- 2-4 weeks

Currently, it can take up to 10 business days (and \$10) from time of request to obtain a copy of a crime report. Upon your request as a victim, how long do you think it should take a Police Department to provide you with a copy of your crime report?
(400


■ 2 Business Days ■ 1 Week ■ 2 Weeks $\quad$ 2-4 Weeks

## Policing Strategy

9. Would you like to see more community policing and community engagement by police in Baltimore? This would include officer foot patrols in neighborhoods, police officers collaborating with community members to solve community issues, and regular, nonenforcement, personal interaction with police officers.

- Yes
- No

Would you like to see more community policing and community engagement by police in Baltimore? This would include officer foot patrols in neighborhoods, police officers collaborating with community members to solve community issues, and regular, non-enfor

10. If yes, what type of policing strategies would you want to see?

- Regular, courteous, and respectful engagement with officers
- Foot Patrols
- Bike Patrols
- Regular community/neighborhood meeting attendance by officers
- Events that enable you to get to know your neighborhood officers
- Other...

If yes, what type of policing strategies would you want to
see?
(Multiple responses).

11. Community priorities are important to the Baltimore Police Department. Please select up to 5 of the potential priorities that you deem the "Highest Priority"

- Crime prevention and reduction
- Traffic enforcement
- Building positive relationships with young people
- Building positive relationships with our diverse communities
- Violence reduction
- Response time to emergency calls for service
- Neighborhood problem-solving
- Strengthening police-community partnerships and collaboration
- Working with Non-Governmental Organizations and City/County/State agencies to provide services to the homeless
- Gang prevention and intervention
- Police accountability
- Implementing programs to reduce implicit bias

Community priorities are important to the Baltimore Police Department. Please select up to 5 of the potential priorities that you deem the "Highest Priority".
(Multiple responses).

12. What initiatives would you like to be pursued in the Baltimore Police Department to improve services to the community?

- Increased officer staffing levels responding to calls for service
- Increased community outreach and engagement
- Neighborhood-specific concerns and presence
- Crime prevention/reduction strategies
- Community policing
- Ensure that enforcement of all laws is done without bias
- Other...


# What initiatives would you like to be pursued in the Baltimore Police Department to improve services to the community? 

(Multiple responses).



[^0]:    ${ }^{10}$ Baltimore Police Department. (2018). BPD end of year reports 2013-2018. Provided to PF team by BPD via email June 18, 2018.

[^1]:    ${ }^{11}$ This minimum was derived in approximately 2013 by BPD staff and used to implement BPD Policy 819.
    ${ }^{12}$ Rector, K. (2018, January 1). After third year of rampant violence, Baltimore searches wearily for answers. The Baltimore Sun. Retrieved from http://www.baltimoresun.com/news/maryland/crime/bs-md-ci-2017-violence-20171229-story.html

[^2]:    ${ }^{13}$ Spelman, W. (2016, July 25). The Murder Mystery: Police Effectiveness and Homicide. Quantitative Criminology, 33:859-886.
    ${ }^{14}$ Bonkiewicz, L. (2015, September 16). Exploring how an area's crime-to-cop ratios impact patrol officer productivity. Policing: An International Journal of Police Strategies \& Management, 39(1): 19-35.
    ${ }^{15}$ United States of America v. Police Department of Baltimore City, et. al., (D. Md. 2017). Retrieved from https://www.justice.gov/opa/file/925056/download
    ${ }^{16}$ Civil Rights Division. (2016, August 10). Investigation of the Baltimore City Police Department. U.S. Department of Justice. Retrieved from https://www.justice.gov/crt/file/883296/download
    ${ }^{17}$ United States of America v. Police Department of Baltimore City, et. al. (2017).
    ${ }^{18}$ Ibid.

[^3]:    ${ }^{19}$ lbid.
    ${ }^{20}$ These recommendations are made in Baltimore Police Department Technology Resource Study submitted to the Court on June 21, 2018. The report can be retrieved from:
    https://static1.squarespace.com/static/59db8644e45a7c08738ca2f1/t/5b32720b88251bbafaff7440/15300326589 22/Exhibit+1+BPD+Final+Tech+Inventory+Study.pdf

[^4]:    ${ }^{21}$ Wilson, J. and A. Weiss. "Police Staffing Allocation and Managing Workload Demand: A Critical Assessment of Existing Practices" (2014, February 25). Policing Advance Access.

[^5]:    ${ }^{22}$ McCabe, James. An Analysis of Police Department Staffing: How Many Officers Do You Really Need? (2014). Retrieved from
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[^6]:    ${ }^{24}$ Maryland State Archives. (2018, February 13). Baltimore City, Maryland: Historical Chronology. Retrieved from http://msa.maryland.gov/msa/mdmanual/36loc/bcity/html/bcity.html
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[^7]:    ${ }^{26}$ U.S. Census Bureau. (2017). QuickFacts: Baltimore city, Maryland; United States. Retrieved from https://www.census.gov/quickfacts/fact/table/baltimorecitymaryland,US/PST045216
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    ${ }^{32} \mathrm{Ibid}$.
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[^9]:    ${ }^{37}$ Rector, K. (2018, January 1). After third year of rampant violence, Baltimore searches wearily for answers. The Baltimore Sun. Retrieved from http://www.baltimoresun.com/news/maryland/crime/bs-md-ci-2017-violence-20171229-story.html
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[^11]:    ${ }^{46}$ At BPD's request, this comes from the August 2018 version of the revised Mission Statement and Values. The full draft statement can be retrieved at https://www.baltimorepolice.org/0000-draft-mission-statement ${ }^{47}$ Ibid.
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[^12]:    ${ }^{49}$ Baltimore Police Department. (2018, May 15). Baltimore Police Department Organizational Chart. Retrieved from https://www.baltimorepolice.org/sites/default/files/General\%20Website\%20PDFs/BPDOrgChart.pdf

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[^15]:    59 *Signifies consent decree city. While these cities do not have demographics that are as closely aligned to Baltimore, the inclusion of consent decree requirements provides a unique aspect of comparison.
    ${ }^{60}$ Population and income estimates have been pulled from the U.S. Census Bureau. See https://www.census.gov/quickfacts/fact/table/baltimorecitymaryland,baltimorecitymarylandcounty,US/PST04521 6
    ${ }^{61}$ Demographic information has been pulled from the U.S. Census Bureau, American Fact Finder, Profile of General Population and Housing Characteristics: 2010, Demographic Profile Data. For more see https://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml\#
    ${ }^{62}$ Crime rates have been pulled from CBS Chicago's calculations of violent crime statistics for American cities, based on FBI Uniform Crime Report numbers. For more see http://chicago.cbslocal.com/691526-2/

[^16]:    63 *Signifies a city that currently is or recently has been under consent decree. While these cities do not have demographics that are as closely aligned to Baltimore, the inclusion of consent decree requirements provides a unique aspect of comparison.
    ${ }^{64}$ Actual staffing as reported to the FBI. For more see https://ucr.fbi.gov/crime-in-the-u.s/2016/crime-in-the-u.s.-2016/tables/table-26/table-26.xls/view
    ${ }^{65}$ BPD's numbers include their full-service crime laboratory, which is primarily staffed by civilians. Few of the departments have full-service crime labs included as part of their actual department staffing; thus, BPD's comparative civilian to sworn staffing ratio may be even higher than if they did not have a crime lab and if the staff were not included.
    ${ }^{66}$ Email from staff member, New Orleans Police Department. (2018, May 4). Provided to PF team May 4, 2018.
    ${ }^{67}$ Email from Captain, Cleveland Division of Police. (2018, May 4). Provided to PF team May 4, 2018.
    ${ }^{68}$ Email from employee, Newark Police Division. (2018, May 11). Provided to PF team May 11, 2018.
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    ${ }^{70}$ Email from staff member, New Orleans Police Department. (2018, May 4).
    ${ }^{71}$ Email from Captain, Cleveland Division of Police. (2018, May 4).
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[^17]:    ${ }^{73}$ Oakland Police Department. (2016). Oakland Police Department 2016 Annual Report. Retrieved from http://www2.oaklandnet.com/oakca1/groups/police/documents/webcontent/oak066735.pdf ${ }^{74}$ Seattle Police Department. (n.d.). Leading Police Reform: The Seattle Police Department's Strategies for the Future. Retrieved from
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    ${ }^{79}$ City of Cleveland. (2016, March 21). 2016 Budget Book. Retrieved from http://www.city.cleveland.oh.us/sites/default/files/forms publications/2016BudgetBook.pdf
    ${ }^{80}$ City of Newark. (n.d.). Department of Public Safety. Retrieved from http://newarkpdonline.org/

[^18]:    ${ }^{81}$ City of Denver. (2017). Response Time Definitions from 911 Call to Arrived on Scene. Retrieved from https://www.denvergov.org/content/dam/denvergov/Portals/720/documents/statistics/2017/ResponseTimesfro m911CalltoArrivedonScene20132017.pdf
    ${ }^{82}$ Metropolitan Police Department. (2013, February). FY12 Performance Accountability Report. Retrieved from https://oca.dc.gov/sites/default/files/dc/sites/oca/publication/attachments/MPD FY12PAR.pdf
    ${ }^{83}$ Caution to Readers about budget figure: Some cities have costs like IT, Fleet, and support services in a centralized budget and not in department budgets, so comparing budget 'apples to apples' between cities is extremely difficult.
    ${ }^{84}$ Baltimore Police Department. (2018). Baltimore Police Department. Retrieved from
    https://www.baltimorepolice.org/
    ${ }^{85}$ Denver Police Department. (2014). 2014 Annual Report: Denver Police Department. Retrieved from https://www.denvergov.org/content/dam/denvergov/Portals/720/documents/AnnualReports/2014 Annual Repo rt.pdf
    ${ }^{86}$ Oakland Police Department. (2016). Oakland Police Department 2016 Annual Report. Retrieved from http://www2.oaklandnet.com/oakca1/groups/police/documents/webcontent/oak066735.pdf
    ${ }^{87}$ Memphis Police Department. (2016). Memphis Police Department 2016 Annual Report. Retrieved from http://www.memphispolice.org/pdf/Annual\%20Report/2016 MPD Annual Report Web.pdf
    ${ }^{88}$ https://www.seattle.gov/city-budget/2018-proposed-budget/police
    ${ }^{89}$ Metropolitan Police Department. (2016). Metropolitan Police Department Annual Report 2016. Retrieved from https://mpdc.dc.gov/sites/default/files/dc/sites/mpdc/publication/attachments/MPD\%20Annual\%20Report\%2020 16 lowres.pdf
    ${ }^{90}$ City of Detroit. (2017, June 30). Comprehensive Annual Financial Report. Retrieved from http://www.detroitmi.gov/Portals/0/docs/finance/accounting/City\%20of\%20Detroit\%20FY17\%20CAFR\%20FINAL\% 20WEB.pdf?ver=2018-02-01-171352-813

[^19]:    ${ }^{91}$ Stojkovic, Kalinich, and Klofas. "Criminal Justice Organizations: Administration and Management." Sixth Edition. (2015). Cengage Learning.
    ${ }^{92}$ Cordner, Gary. "Community policing." (2014). The Oxford handbook of police and policing: 148-171.
    ${ }^{93}$ Organizational charts for each of the comparable departments are listed in Appendix 13.4.

[^20]:    94 * Signifies cities that are currently or have been recently under consent decrees. While these cities do not have demographics closely aligned to Baltimore, the inclusion of consent decree requirements provides a unique aspect of comparison.
    ${ }^{95}$ In Cleveland, Ohio, the DC Executive Officer reports to the Chief of Police and direct reports to both have been included in the table for consistency. The Chief of Police reports to the Safety Director, which directly oversees the Office of Professional Standards that is not reflected in the table.
    ${ }^{96}$ The Chief of Police is the agency head for police services in Newark, New Jersey, but reports to the Public Safety Director, which directly oversees other related divisions like Training, Human Resources, and Planning, not reflected in the table.
    ${ }^{97}$ Federal Bureau of Investigation. (2016). 2016 Crime in the United States: Colorado. Retrieved from https://ucr.fbi.gov/crime-in-the-u.s/2016/crime-in-the-u.s.-2016/tables/table-26/table-26-state-cuts/table-26colorado.xls

[^21]:    ${ }^{98}$ Planning, Research and Support. (2017, June 4). Organizational Chart. Denver Police Department. Retrieved from https://www.denvergov.org/content/dam/denvergov/Portals/720/documents/PoliceDeptOrgChart.pdf
    ${ }^{99}$ Federal Bureau of Investigation. (2016). 2016 Crime in the United States: California. Retrieved from https://ucr.fbi.gov/crime-in-the-u.s/2016/crime-in-the-u.s.-2016/tables/table-26/table-26-state-cuts/table-26california.xls
    ${ }^{100}$ Oakland Police Department. (2016). Oakland Police Department 2016 Annual Report. Retrieved from http://www2.oaklandnet.com/oakca1/groups/police/documents/webcontent/oak066735.pdf
    101 Ibid.
    102 lbid .
    ${ }^{103}$ Federal Bureau of Investigation. (2016). 2016 Crime in the United States: Washington. Retrieved from https://ucr.fbi.gov/crime-in-the-u.s/2016/crime-in-the-u.s.-2016/tables/table-26/table-26-state-cuts/table-26washington.xls

[^22]:    ${ }^{104}$ Seattle Police Department. (n.d.). Leading Police Reform: The Seattle Police Department's Strategies for the Future. Retrieved from https://www.seattle.gov/Documents/Departments/Police/Publications/Leading Police Reform.pdf
    ${ }^{105}$ Miletich, S., and M. Carter. (2018, January 10). "Seattle police found in 'full and effective compliance' with court-ordered reforms." The Seattle Times. Retrieved from https://www.seattletimes.com/seattle-news/crime/seattle-police-found-in-full-and-effective-compliance-with-court-ordered-reforms/
    ${ }^{106}$ Seattle Police Department. (n.d.). Leading Police Reform: The Seattle Police Department's Strategies for the Future. Retrieved from
    https://www.seattle.gov/Documents/Departments/Police/Publications/Leading Police Reform.pdf
    ${ }^{107}$ Federal Bureau of Investigation. (2016). 2016 Crime in the United States: Tennessee. Retrieved from https://ucr.fbi.gov/crime-in-the-u.s/2016/crime-in-the-u.s.-2016/tables/table-26/table-26-state-cuts/table-26tennessee.xls
    ${ }^{108}$ Memphis Police Department. (2016). Memphis Police Department 2016 Annual Report. Retrieved from http://www.memphispolice.org/pdf/Annual\%20Report/2016 MPD Annual Report Web.pdf ${ }^{109}$ lbid.

[^23]:    ${ }^{110}$ Memphis Police Department. (2017, July). Organizational Structure. Retrieved from http://www.memphispolice.org/pdf/Organizational Chart July 2017.pdf
    ${ }^{111}$ Federal Bureau of Investigation. (2016). 2016 Crime in the United States: District of Columbia. Retrieved from https://ucr.fbi.gov/crime-in-the-u.s/2016/crime-in-the-u.s.-2016/tables/table-26/table-26-state-cuts/table-26-district-of-columbia.xls
    ${ }^{112}$ Metropolitan Police Department. (2016). Metropolitan Police Department Annual Report 2016. Retrieved from https://mpdc.dc.gov/sites/default/files/dc/sites/mpdc/publication/attachments/MPD\%20Annual\%20Report\%2020 16 lowres.pdf
    ${ }^{113}$ Metropolitan Police Department. (2008). Metropolitan Police Department Annual Report 2008. Retrieved from https://mpdc.dc.gov/sites/default/files/dc/sites/mpdc/publication/attachments/ar 2008 web.pdf
    ${ }^{114}$ Metropolitan Police Department. (2016). Metropolitan Police Department Annual Report 2016. Retrieved from https://mpdc.dc.gov/sites/default/files/dc/sites/mpdc/publication/attachments/MPD\%20Annual\%20Report\%2020 16 lowres.pdf
    ${ }^{115}$ Metropolitan Police Department. (2018, March 30). Organizational Chart. Retrieved from https://mpdc.dc.gov/sites/default/files/dc/sites/mpdc/publication/attachments/MPD\%200rg\%20Charts 0220201 8.pdf

[^24]:    ${ }^{116}$ Federal Bureau of Investigation. (2016). 2016 Crime in the United States: Michigan. Retrieved from https://ucr.fbi.gov/crime-in-the-u.s/2016/crime-in-the-u.s.-2016/tables/table-26/table-26-state-cuts/table-26michigan.xls
    ${ }^{117}$ Detroit Police Department. (2015). Detroit Police Department: 2015 Annual Report. Retrieved from https://www.scribd.com/document/312605928/2015-Annual-Report-Detroit-Police-Department
    ${ }^{118}$ City of Detroit. (2017, June 30). Comprehensive Annual Financial Report. Retrieved from http://www.detroitmi.gov/Portals/0/docs/finance/accounting/City\%20of\%20Detroit\%20FY17\%20CAFR\%20FINAL\% 20WEB.pdf?ver=2018-02-01-171352-813
    ${ }^{119}$ Detroit Police Department. (2015). Detroit Police Department: 2015 Annual Report. Retrieved from https://www.scribd.com/document/312605928/2015-Annual-Report-Detroit-Police-Department
    ${ }^{120}$ Federal Bureau of Investigation. (2016). 2016 Crime in the United States: Louisiana. Retrieved from https://ucr.fbi.gov/crime-in-the-u.s/2016/crime-in-the-u.s.-2016/tables/table-26/table-26-state-cuts/table-26louisiana.xls

[^25]:    ${ }^{121}$ Office of the Inspector General. (2014, May 28). New Orleans Police Department Staffing and Deployment: Meeting the Demand of Citizen Calls for Service with Existing Resources. Retrieved from http://www.nolaoig.gov/index.php?option=com mtree\&task=att download\&link id=25\&cf id=37
    ${ }^{122}$ New Orleans Office of Inspector General. (2016). Progress and Productivity: 2016 Annual Report. Retrieved from http://www.nolaoig.gov/images/OIG-2016-AnnualReport-2.pdf
    ${ }^{123}$ New Orleans Police Department. (n.d.). Office of the Superintendent. Retrieved from https://www.nola.gov/getattachment/NOPD/About-Us/Bureaus/NOPD-ORGANIZATIONAL-STRUCTURE.pdf/
    ${ }^{124}$ Federal Bureau of Investigation. (2016). 2016 Crime in the United States: Ohio. Retrieved from https://ucr.fbi.gov/crime-in-the-u.s/2016/crime-in-the-u.s.-2016/tables/table-26/table-26-state-cuts/table-26ohio.xls
    ${ }^{125}$ Cleveland Police Monitoring Team. (2018, January). Fourth Semiannual Report. Retrieved from https://static1.squarespace.com/static/5651f9b5e4b08f0af890bd13/t/5a689fa8f9619a7f3c94f209/151680606008 2/Fourth+Semiannual+Report-FILED.pdf
    ${ }^{126}$ Cleveland Division of Police. (2016). 2016 Year End Report. Retrieved from http://www.city.cleveland.oh.us/sites/default/files/forms publications/PoliceStatsYearEndReport2016.pdf?id=111 03
    ${ }^{127}$ City of Cleveland. (2016, March 21). 2016 Budget Book. Retrieved from http://www.city.cleveland.oh.us/sites/default/files/forms publications/2016BudgetBook.pdf

[^26]:    ${ }^{128}$ Ibid.
    ${ }^{129}$ City of Cleveland Department of Public Safety. (2011, January 3). Division of Police Organizational Structure. Retrieved from http://www.city.cleveland.oh.us/sites/default/files/forms publications/CPDOrgChart.pdf?id=2889
    ${ }^{130}$ Federal Bureau of Investigation. (2016). 2016 Crime in the United States: New Jersey. Retrieved from https://ucr.fbi.gov/crime-in-the-u.s/2016/crime-in-the-u.s.-2016/tables/table-26/table-26-state-cuts/table-26-new-jersey.xls
    ${ }^{131}$ NPD Independent Monitor. (n.d.). The Consent Decree. Retrieved from https://www.newarkpdmonitor.com/overview/
    ${ }^{132}$ City of Newark. (n.d.). Department of Public Safety. Retrieved from http://newarkpdonline.org/
    ${ }^{133}$ Newark Police Division. (2018, March 5). Newark Police Division Organizational Plan. Provided to PF team from Newark Police Division employee via email May 11, 2018.

[^27]:    ${ }^{134}$ BPD calculates vacancies as funded to actual.
    ${ }^{135}$ Duncan, I. "Baltimore Police assign 115 extra officers to patrol the streets in hopes of curbing overtime spending, crime." (2018, July 11). Baltimore Sun. Retrieved from
    http://www.baltimoresun.com/news/maryland/crime/bs-md-ci-extra-police-officers-20180711-story.html ${ }^{136}$ PF team call with Lieutenant, BPD. (2018, August 9).
    ${ }^{137}$ McCabe, James. An Analysis of Police Department Staffing: How Many Officers Do You Really Need? (2014). Retrieved from
    https://icma.org/sites/default/files/305747 Analysis\%20of\%20Police\%20Department\%20Staffing\%20 \%20McCab e.pdf
    ${ }^{138}$ Ibid.
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[^28]:    ${ }^{139}$ Five years of CAD data were requested but inconsistencies in the data, including a change in the CAD system in the last five years, prompted the PF team to receive and focus on analyzing one year.

[^29]:    ${ }^{140}$ Police Foundation. (n.d.). Community Policing. Retrieved from http://www.policefoundation.org/content/community-policing

[^30]:    ${ }^{141}$ This is assuming that officers notify dispatch when they conduct self- initiated activity, and that the communications staff enter that information into the CAD system.
    ${ }^{142}$ Police Executive Research Forum. (2012, July). Austin Police Department Patrol Utilization Study: Final Report. Retrieved from http://www.austincrime.org/wp-content/uploads/PERF-Final-Report-Austin-copy.pdf
    ${ }^{143}$ Ibid.

[^31]:    ${ }^{144}$ Per comment from 'HK' dated July 9, 2018, during review of 2 ${ }^{\text {nd }}$ draft of staffing study. HK also added that, 'In other jurisdictions this may be labeled "Investigate the unknown trouble."

[^32]:    ${ }^{145}$ Shift strength reports are recorded daily and show for each district and each shift the number of lieutenants, sergeants, the shift commander, the number of officers that are supposed to be on patrol duty, the number actually showing up as scheduled, the number on overtime and the number drafted to make up shortages.
    ${ }^{146}$ Memorandum of Understanding between The Baltimore City Police Department and the Baltimore City Lodge No. 3, Fraternal Order of Police, Inc. Unit I, Fiscal Years 2017-2018. Retrieved from https://laborcommissioner.baltimorecity.gov/sites/default/files/labor commissioner/attachments/FOP\%20Unit\%20I\%20FY\%20 2017-2018\%20(Noted\%20Copy\%205.16.18).pdf

[^33]:    ${ }^{147}$ The number of officer hours available for a week based on the Shift Strength reports totaled for each district for a week.
    ${ }^{148}$ The average number of calls for service hours in a week.
    ${ }^{149}$ Averages the percent of officer time consumed from the overlay of the CFS hours matrix with the staffing numbers matrix.
    ${ }^{150}$ The average number of hours per week for self-initiated activities minus time spent on details.
    ${ }^{151}$ Overlays staffing with self-initiated time to show the average time consumed by self-initiated activities.
    ${ }^{152}$ The average time consumed by details per week.
    ${ }^{153}$ The average time consumed by details as a percentage.
    ${ }^{154}$ The total percent of police officer assigned to sector patrol time consumed by calls for service, self-initiated activity and details. It is important to note that this time fluctuates by time of day / day of the week - some shifts may have a large amount of discretionary time, while others are needed to respond to calls constantly. In addition, discretionary time may be broken up in short blocks of time between calls for service.

[^34]:    ${ }^{155}$ Appendix 13.6: Calls for Service Analysis Tables display the average amount of officer time consumed by calls for service for each district by hour and day of the week.
    ${ }^{156}$ BPD plans on an 80-hour in-service training requirement over the next year.
    ${ }^{157}$ BPD personnel told the PF team that most officers do not take their 40-minute break and if they do, it is not confirmed by commanding officers. Lt. Loeffler notes on draft report, July 9, 2018.

[^35]:    ${ }^{158}$ An Analysis of Police Department Staffing: How Many Officers Do You Really Need?
    ${ }^{159}$ Ibid.

[^36]:    ${ }^{169}$ Baltimore Police Department. (2017, February 12). Policy 819: Patrol Staffing Shortages. Retrieved from https://www.powerdms.com/public/BALTIMOREMD/documents/113080

[^37]:    ${ }^{171}$ United States of America v. Police Department of Baltimore City, et. al.
    ${ }^{172}$ Cordner, Gary. "Community policing." The Oxford handbook of police and policing (2014): 148-171.

[^38]:    ${ }^{173}$ Police Executive Research Forum. (2008, December). Organizational Assessment of the San Francisco Police Department: A Technical Report. Final Report.
    https://sanfranciscopolice.org/sites/default/files/FileCenter/Documents/14694-
    San Francisco Organizational Review Final Report.pdf
    ${ }^{174}$ Police Executive Research Forum. (2012, July). Austin Police Department Patrol Utilization Study: Final Report. Retrieved from http://www.austincrime.org/wp-content/uploads/PERF-Final-Report-Austin-copy.pdf

[^39]:    175 "CID Staffing Charts." (2018, April 30). Provided by BPD to the PF team June 11, 2018.
    ${ }^{176}$ BPD responses to Police Foundation Staffing Study Materials Request List, sent from Compliance, Accountability \& External Affairs Division to PF team. (2018, January 9).
    177 "CID Staffing Charts." (2018, April 30).
    ${ }^{178}$ Davis, R., C. Jensen, K. Kitchens. Cold-Case Investigations: An Analysis of Current Practices and Factors Associated with Successful Outcomes. (2011). RAND Corporation. Retrieved from https://www.rand.org/pubs/technical reports/TR948.html

[^40]:    ${ }^{179}$ Captain, Homicide Section, interview with PF team, December 19, 2017.
    180 "CID Staffing Charts." (2018, April 30).
    ${ }^{181}$ BPD responses to Police Foundation Staffing Study Materials Request List, sent from Compliance, Accountability \& External Affairs Division to assessment team. (2018, January 9).
    182 "CID Staffing Charts." (2018, April 30).
    ${ }^{183} 2017$ SIS case load received via email from Major, SIS. (2018, May 24). Provided to assessment team May 24, 2018.
    ${ }^{184}$ Major, SIS, interview with assessment team, December 19, 2017.

[^41]:    ${ }^{185}$ Ibid.
    ${ }^{186}$ There are a few different civilian positions within investigative units: A Community Service Officer (CSO) is an administrative position that performs clerical and administrative tasks. A Contract Specialist (CW) is a contractual employee of BPD, typically retired officers. They also assist with some administrative aspects of case work. An Office Supervisor (OS) is typically in charge of the civilian personnel of a Unit or Section. They often report to the Section's Administrative Sergeant or a Unit Commander, and are responsible for payroll, leave, and other personnel records.
    187 "CID Staffing Charts." (2018, April 30).
    1882017 SIS case load received via email from Major, SIS. (2018, May 24).
    ${ }^{189}$ Major, SIS, comments to report draft. (2018, June 12). Provided to PF team, June 12, 2018.
    190 "CID Staffing Charts." (2018, April 30).
    ${ }^{191}$ Major, SIS, interview with PF team, December 19, 2017.
    1922017 SIS case load received via email from Major, SIS. (2018, May 24).

[^42]:    ${ }^{193}$ Major, SIS, interview with PF team, December 19, 2017.
    ${ }^{194}$ Major, SIS, interview with PF team, December 19, 2017.
    195 "CID Staffing Charts." (2018, April 30).
    ${ }^{196}$ Major, SIS, interview with PF team, December 19, 2017.
    1972017 SIS case load received via email from Major, SIS. (2018, May 24).
    198 "CID Staffing Charts." (2018, April 30).
    199 Ibid.
    ${ }^{200}$ Major, SIS, interview with PF team, December 19, 2017.
    ${ }^{201} 2017$ SIS case load received via email from Major, SIS. (2018, May 24).
    ${ }^{202}$ Major, SIS, comments to PF team, June 28, 2018.

[^43]:    ${ }^{203}$ Major, SIS, interview with PF team, December 19, 2017.
    ${ }^{204}$ Baltimore had approximately 622,000 residents in 2018.
    205 "CID Staffing Charts." (2018, April 30).
    ${ }^{206} 2017$ SIS case load received via email from Major, SIS. (2018, May 24).
    ${ }^{207}$ Major, SIS, interview with PF team, December 19, 2017.

[^44]:    ${ }^{208}$ Ibid.
    209 "CID Staffing Charts." (2018, April 30). Provided to the the PF team by BPD.
    ${ }^{210}$ Major, District Detective Section, interview with PF team, December 19, 2018.
    ${ }^{211}$ BPD responses to Police Foundation Staffing Study Materials Request List, sent from Compliance, Accountability \& External Affairs Division to assessment team. (2018, January 9).
    212 "CID Staffing Charts." (2018, April 30).
    ${ }^{213}$ Major, District Detective Section, interview with PF team, October 4, 2018.
    ${ }^{214}$ Major, District Detective Section, interview with PF team, December 19, 2018.
    ${ }^{215}$ BPD responses to Police Foundation Staffing Study Materials Request List, sent from Compliance, Accountability \& External Affairs Division to assessment team. (2018, January 9).
    ${ }^{216}$ Duncan, I. "Baltimore Police assign 115 extra officers to patrol the streets in hopes of curbing overtime spending, crime." (2018, July 11). Retrieved from http://www.baltimoresun.com/news/maryland/crime/bs-md-ci-extra-police-officers-20180711-story.html

[^45]:    ${ }^{217}$ Carter, David L. (2013), Homicide Process Mapping: Best Practices for Increasing Homicide Clearances. Washington, DC: Bureau of Justice Assistance, p.9. Retrieved from https://www.iir.com/Documents/Homicide Process Mapping September email.pdf
    ${ }^{218}$ Ibid.

[^46]:    ${ }^{219}$ Police Executive Research Forum. (2016, April). Review of the Baltimore Police Department's Homicide Investigation Process: Findings and Recommendations.
    ${ }^{220}$ The number of homicide cases does not always equate to the number of homicide victims; thus, the count of victims for each year may differ.

[^47]:    ${ }^{221}$ Austin Police Department Patrol Utilization Study: Final Report.
    ${ }^{222}$ Ibid.

[^48]:    ${ }^{223}$ Major, SIS, interview with PF team, December 19, 2017.
    ${ }^{225}$ Total Number of Cases in 2017 = Total number of cases in 2017. Can be replaced with number of cases in another year period, i.e. 2018 figures.
    ${ }^{228}$ BPD Annual Hours per Detective per Year = BPD Average Rate of Time for Detectives to Conduct Investigations $x$ 2080.
    ${ }^{229}$ Detectives Needed = Total Estimated Hours Needed to Investigate Cases in a Year / BPD Annual Hours per Detective per Year.
    ${ }^{230}$ Current Detectives $=$ The number of BPD detectives assigned to the unit as of April 30, 2018. Can be replaced with a more current number of detectives.

[^49]:    ${ }^{224}$ Average Time per Case Weighted by Solvability Factors = (contact only percentage of total cases $x$ average hours per case) + (less complex percentage of total cases x average hours per case) + (typical percentage of total cases $x$ average hours per case) + (more complex percentage of total cases $x$ average hours per case).
    ${ }^{226}$ Total Estimated Hours Needed to Investigate Cases in a Year = Average Time per Case Weighted by Solvability Factors x Total Number of Cases in 2017.
    ${ }^{227}$ BPD Average Rate (\%) of Time for Detectives to Conduct Investigations = The average rate of time detectives in the unit have available to conduct investigations. Calculated based on the leave records, January 1-December 31, 2018, provided by BPD. The breakdown of leave for each of the investigative units shown is displayed in Table 34 in Appendix 13.7.2. It should be noted that calculations for smaller units like Arson were based on an extremely low number of detectives whereas larger units like Homicide where based on a higher number of detectives and are thus likely to provide a more accurate rate.

[^50]:    ${ }^{231}$ Baltimore Police Department. (2018, May 15). Baltimore Police Department Organizational Chart. Retrieved from https://www.baltimorepolice.org/sites/default/files/General\%20Website\%20PDFs/BPDOrgChart.pdf
    ${ }^{232}$ Baltimore Police Department. "Current OPR Staffing Chart." (2018, May 9). Provided to assessment team May 11, 2018.

[^51]:    ${ }^{233}$ Chief, Office of Professional Responsibility. (2018, August 8). Email forwarded to assessment team August 9, 2018.
    ${ }^{234}$ Chief, Office of Professional Responsibility. (2018, August 8).

[^52]:    ${ }^{235}$ Chief and Major, Office of Professional Responsibility, interview with PF team, September 29, 2017.
    ${ }^{236}$ United States of America v. Police Department of Baltimore, et al. (2017).
    ${ }^{237}$ Chief and Major, Office of Professional Responsibility, interview with PF team, September 29, 2017.
    ${ }^{238}$ Chief, Office of Professional Responsibility. (2018, August 8).

[^53]:    ${ }^{239}$ Staffing is based on May 9, 2018 organizational chart of OPR to reflect actual department staffing.
    ${ }^{240}$ Austin Police Department Patrol Utilization Study: Final Report.
    ${ }^{241}$ Actual staffing numbers for all departments shown are based on 2016 numbers reported to the UCR, as displayed in Table 7: City Demographics Comparisons.

[^54]:    ${ }^{242}$ Chief, Office of Professional Responsibility. (2018, August 8).
    ${ }^{243} 408$ status indicates that a position is filled by an officer on medical leave pending retirement. Personnel in such positions are not able to perform any sworn duties.
    ${ }^{244}$ Memo provided to Staffing Study team members via email by Director, EODS. (2018, May 8).
    ${ }^{245}$ Chief, Office of Professional Responsibility. (2018, August 8).
    246 "PC Weekly Report 12-31-2017." BPD Office of Professional Responsibility.
    ${ }^{247}$ Call between Director, EODS, and PF team. (2018, April 8).

[^55]:    ${ }^{248}$ United States of America v. Police Department of Baltimore City, et al. (2017).
    ${ }^{249}$ BPD Monitoring Team. (2018, February 16). First-Year Monitoring Plan. Retrieved from https://www.baltimorepolice.org/sites/default/files/General\%20Website\%20PDFs/FirstYearMonitoringPlan2-1618.pdf
    ${ }^{250}$ Chief, Office of Professional Responsibility. (2018, August 8). Email forwarded to assessment team August 9, 2018.

[^56]:    ${ }^{251}$ Baltimore Police Department. (2016, July 1). Policy 212: Field Training Evaluation Program. Retrieved from https://www.baltimorepolice.org/212-field-training-and-evaluation-program
    2522017 in-service training consisted of two weeks while 2018 in-service training is one week. 2019 in-service training is anticipated to be two weeks.
    ${ }^{253}$ BPD Police Training Academy. "Staffing Information Sheet." (2018, January 19).

[^57]:    ${ }^{254}$ Memo on Assessment and Recommendations for Entry Level Academy, from Sergeant, Academic Records, to Director, Police Training Academy (2017, November 1). Provided to PF team, November 1, 2017.
    ${ }^{255}$ Memo on Assessment of the Education \& Training Section, from Captain, Education \& Training Section, to Major, Education \& Training Section. (2018, January 22). Provided to PF team, February 12, 2018.
    ${ }^{256}$ Memo on Assessment and Recommendations for Entry Level Academy, from Sergeant, Academic Records, to Director, Police Training Academy. (2017, November 1). Provided to PF team, November 1, 2017.
    ${ }^{257}$ Memo on Trainee Stats 2008- Present, from Sergeant, Academic Records, to Director, Police Training Academy. (2017, November 13). Provided to PF team, November 13, 2017.

[^58]:    ${ }^{258}$ Memo on Assessment of the Education \& Training Section, from Captain, Education \& Training Section, to Director, Education \& Training Section. (2018, January 22). Provided to PF team, February 12, 2018.
    ${ }^{259}$ Baltimore Police Department Training Academy Needs Assessment. Prepared by Director, Professional Development and Training Academy. (2015, July). Provided to PF team, November 1, 2017.
    ${ }^{260}$ Chief (ret.) from California via email to PF team. (2018, July 18).
    ${ }^{261}$ Actual staffing numbers for all departments shown are based on 2016 numbers reported to the UCR, as displayed in Table 7: City Demographics Comparisons.

[^59]:    ${ }^{262}$ Memo on PDTA Schedule and Staff Shortage, from Captain, Professional Development and Training Academy, to Director, Professional Development and Training Academy. (2017, August 14). Provided to assessment team, November 1, 2017.
    ${ }^{263}$ Ibid.

[^60]:    ${ }^{264}$ Baltimore Police Department Technology Resource Study. (2018, June).

[^61]:    ${ }^{265}$ A series of memos provided to the staffing study team from 2015 to 2018 have the common theme of academy personnel shortages. These include a memo from Director, Professional Development and training academy, to then-Commissioner, June 21, 2015; memo from Commander, Entry Level Training Academy, to then-Director, PTA, June 22, 2017; memo from Captain, Training, to then-Director, PTA, August 14, 2017; memo from Captain to Director, Education \& Training Section, January 22, 2018.
    ${ }^{266}$ Information provided by Deputy Superintendent, New Orleans Police Department, via Shannon Sullivan. (2018, June 28).
    ${ }^{267}$ Some of these recommendations reference an internal BPD memo from Lieutenant, Entry Level Training, to Major, Education and Training regarding BPD Training Academy staffing and workload. (2018, March 20). Provided to PF team, March 30, 2018.

[^62]:    ${ }^{269}$ BPD Monitoring Team. (2018, February 16). First-Year Monitoring Plan.
    ${ }^{270}$ These recommendations have been pulled from the Baltimore Police Department Technology Resource Study, developed in partnership with the Police Foundation.

[^63]:    ${ }^{271}$ Science and Management Services Division. Organizational Chart. (2018, June 13). Provided to PF team, August 1, 2018.
    ${ }^{272}$ Chief, Science and Management Services Division, email forwarded to PF team, August 1, 2018.
    ${ }^{273}$ Forensic Science Initiative. Project FORESIGHT Annual Report, 2015-2016. (2017, May). West Virginia University. Retrieved from https://business.wvu.edu/files/d/42b9bcbd-e563-4de2-845b-74075f882bcb/foresight-benchmark-data-2015-2016.pdf
    ${ }^{274}$ Matrix Consulting Group. (2017, May 26). Police Department Workload / Staffing Study: Kansas City, Missouri. Retrieved from https://www.matrixcg.net/wp-content/uploads/2016/10/Kansas-City-MO-Police-Report-5-2617.pdf

[^64]:    275 "Staffing Analysis Labs," Science and Management Services Division. (2018). Provided to PF team August 1, 2018.
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    ${ }^{295}$ Managing Large Scale Security Events.
    296 "Marathon Saturday 21 October 2017" planned BPD detail numbers show unknown numbers of assisting agency personnel. (2017, October 5). Provided to PF team October 30, 2017.
    ${ }^{297}$ Major, Southern District, interview with PF team members, February 28, 2018.

[^70]:    ${ }^{298}$ Managing Large Scale Security Events.
    ${ }^{299}$ King, William R., and Jeremy M. Wilson. 2014. Integrating Civilian Staff into Police Agencies. Washington, DC: Office of Community Oriented Policing Services.

[^71]:    ${ }^{300}$ Ibid.
    ${ }^{301}$ Information for this section comes from the BPD Civilianization Plan conducted by the BPD Chief Financial Officer in 2017. "Copy of BPD Civilianization Plan 03.31.2017." (2017, March 31). Provided to PF team, June 26, 2017.
    ${ }^{302}$ Science and Management Services Division. "Organizational Chart." (2018, June 13).

[^72]:    ${ }^{303}$ Chief, Office of Professional Responsibility. (2018, August 8). Email forwarded to assessment team August 9, 2018.

[^73]:    ${ }^{304}$ Managing Large Scale Security Events.

[^74]:    ${ }^{305}$ United States of America v. Police Department of Baltimore City, et. al. (2017).
    ${ }^{306}$ As a result of organizational changes, some of these names have changed over the course of this assessment.

[^75]:    ${ }^{307}$ Five years of CAD data were requested but inconsistencies in the data, including a change in the CAD system in the last five years, prompted the PF team to receive and focus on analyzing one year.
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[^76]:    ${ }^{308}$ Police Executive Research Forum. (2008, December). Organizational Assessment of the San Francisco Police Department: A Technical Report. Final Report. Retrieved from https://sanfranciscopolice.org/sites/default/files/FileCenter/Documents/14694-
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    ${ }^{309}$ Police Executive Research Forum. (2012, July). Austin Police Department Patrol Utilization Study: Final Report. Retrieved from http://www.austincrime.org/wp-content/uploads/PERF-Final-Report-Austin-copy.pdf

[^77]:    ${ }^{310}$ Again, only complete records were counted, meaning that records that were not cleared were removed. Week totals shown may not precisely equate the sum of the data shown for each hour as decimal places were shortened for the table display.
    ${ }^{311}$ The Staffing Weekly Hours tables were based on data from shift strength reports from February 3-20, 2018. Given the limited time period examined, there are limitations to the analysis as generalized to the year. BPD was later able to provide shift strength reports from April and May 2018, which were used to determine drafting percentages to fill shift shortages as displayed in Table 17: Staffing Summary from Shift Strength Reports in 'Chapter 5: Additional Considerations for Patrol Staffing.' The PF team reviewed these additional reports for general consistency with the February reports; however, the team did not develop and recreate the tables given the intensity of the process and the unlikelihood of it resulting in significantly different results.

[^78]:    ${ }^{312}$ This is the total number of calls for service in the district following data cleaning, meaning that incomplete records were removed.
    ${ }^{313}$ This is the total number of records labeled self-initiated in the district following data cleaning, meaning that incomplete records were removed.

[^79]:    ${ }^{314}$ This is the total number of calls for service in the district following data cleaning, meaning that incomplete records were removed.
    ${ }^{315}$ This is the total number of records labeled self-initiated in the district following data cleaning, meaning that incomplete records were removed.

[^80]:    ${ }^{316}$ This is the total number of calls for service in the district following data cleaning, meaning that incomplete records were removed.
    ${ }^{317}$ This is the total number of records labeled self-initiated in the district following data cleaning, meaning that incomplete records were removed.

[^81]:    ${ }^{318}$ This is the total number of calls for service in the district following data cleaning, meaning that incomplete records were removed.
    ${ }^{319}$ This is the total number of records labeled self-initiated in the district following data cleaning, meaning that incomplete records were removed.

[^82]:    ${ }^{320}$ This is the total number of calls for service in the district following data cleaning, meaning that records without arrival times or that were otherwise cleared are not counted.
    ${ }^{321}$ This is the total number of records labeled self-initiated in the district following data cleaning, meaning that incomplete records were removed.

[^83]:    ${ }^{322}$ This is the total number of calls for service in the district following data cleaning, meaning that incomplete records were removed.
    ${ }^{323}$ This is the total number of records labeled self-initiated in the district following data cleaning, meaning that incomplete records were removed.

[^84]:    ${ }^{324}$ This is the total number of calls for service in the district following data cleaning, meaning that incomplete records were removed.
    ${ }^{325}$ This is the total number of records labeled self-initiated in the district following data cleaning, meaning that incomplete records were removed.

[^85]:    ${ }^{326}$ This is the total number of calls for service in the district following data cleaning, meaning that incomplete records were removed.
    ${ }^{327}$ This is the total number of records labeled self-initiated in the district following data cleaning, meaning that incomplete records were removed.

[^86]:    ${ }^{328}$ This is the total number of calls for service in the district following data cleaning, meaning that incomplete records were removed.
    ${ }^{329}$ This is the total number of records labeled self-initiated in the district following data cleaning, meaning that incomplete records were removed.

[^87]:    ${ }^{330}$ Average training hours are even higher than 80 hours per officer for many of the other districts as the leave code categorizing training reflects training and conferences. Thus, the hours logged may reflect training in addition to the required in-service training and conferences.

