POLICE STAFFING ASSESSMENT

CARLSBAD POLICE DEPARTMENT
CARLSBAD, CALIFORNIA

POLICE OPERATIONS

CPSM®

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ICMA

Exclusive Provider of Public Safety Technical Services for
International City/County Management Association

THE ASSOCIATION & THE COMPANY

The International City Management Association is a 103-year old, nonprofit professional association of local government administrators and managers, with approximately 13,000 members located in 32 countries.

Since its inception in 1914, ICMA has been dedicated to assisting local governments and their managers in providing services to its citizens in an efficient and effective manner. ICMA advances the knowledge of local government best practices with its website (www.icma.org), publications, research, professional development, and membership. The ICMA Center for Public Safety Management (ICMA/CPSM) was launched by ICMA to provide support to local governments in the areas of police, fire, and emergency medical services.

ICMA also represents local governments at the federal level and has been involved in numerous projects with the Department of Justice and the Department of Homeland Security.

In 2014, as part of a restructuring at ICMA, the Center for Public Safety Management (CPSM) was spun out as a separate company. It is now the exclusive provider of public safety technical assistance for ICMA. CPSM provides training and research for the Association's members and represents ICMA in its dealings with the federal government and other public safety professional associations such as CALEA, PERF, IACP, IFCA, IPMA-HR, DOJ, BJA, COPS, NFPA, and others.

The Center for Public Safety Management, LLC, maintains the same team of individuals performing the same level of service as when it was a component of ICMA. CPSM's local government technical assistance experience includes workload and deployment analysis using our unique methodology and subject matter experts to examine department organizational structure and culture, identify workload and staffing needs, and align department operations with industry best practices. We have conducted more 305 such studies in 41 states and provinces and 215 communities ranging in population from 8,000 (Boone, Iowa) to 800,000 (Indianapolis, Ind.).

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SECTION 1. EXECUTIVE SUMMARY

In May 2014, the Center for Public Safety Management, LLC (CPSM) conducted a comprehensive assessment of all operational aspects of the Carlsbad Police Department. While our analysis covered all aspects of the department's operations, particular areas of focus of that study included identifying appropriate staffing levels given the workload, community demographics, and crime rate; the effectiveness of the organizational structure; and efficiency and effectiveness of bureau/unit processes. In October 2014, CPSM provided a report of our findings and recommendations.

In December 2018, CPSM was commissioned to conduct a limited follow-up study of the department. Specifically, the scope of the present work includes assessing appropriate staffing levels for defined department functions, including Patrol, Traffic, Investigations, Records, and Communications, based upon current workload demands. Included in our evaluation are areas such as the volume of community-initiated calls for service and self-initiated activity, call response times, the impacts of prisoner handling, impacts of homeless and/or mentally ill on service demands, public records requests, and workload impacts related to new or expanding technologies.

As noted, this analysis is limited to the evaluation of staffing needs based upon current workload demands, and unlike the 2014 study, does not include a comprehensive operational assessment to include efficiency and effectiveness of bureau/unit processes. Nonetheless, where CPSM feels that readily identifiable and beneficial changes in staffing models would lead to improvement in operational efficiency and effectiveness, recommendations will be offered.

We analyzed the workload demands using operations research methodology and compared that workload to staffing and deployment levels. We reviewed other performance indicators that enabled us to understand the implications of service demand on current staffing. Our study involved data collection, interviews with key operational and administrative personnel, on-site observations of the job environment, data analysis, and comparative analysis.

This report is made up of two parts, namely the Staffing Assessment and a Data Analysis. The staffing assessment is based upon interviews with staff, the review of numerous documents provided by the city, a data analysis, and the site visit by the CPSM team. The data analysis report primarily examines patrol and traffic workload activity. This information is derived from computer-aided dispatch (CAD) records provided by the department. The two parts of the report complement one another. Readers will note that some information, especially tables and figures, is reflected in both portions of the report; the consultants used the material from the data analysis to assist in their staffing assessment. We urge the consumers of this information to thoroughly review the report in its entirety.

As part of this Executive Summary, below we have included a master list of unit-specific staffing recommendations for consideration. Some of these recommendations include the addition of staff within the existing organizational framework, while others address opportunities for the creation of new job classifications and/or the reassignment/repurposing of job duties. In the report narrative, we will offer a detailed discussion of supporting factors for each recommendation. We believe these recommendations, if adopted, will enhance the department's capacity to serve the community.

CPSM staff would like to thank Chief Gallucci, Assistant Chief Williams, Captains Magro and Pascual, Senior Management Analyst Anderson, and the entire staff of the Carlsbad Police Department for their gracious cooperation and assistance in completing this project.

KEY RECOMMENDATIONS

Operations Bureau

Patrol Recommendations

1. Increase sergeant staffing by four FTEs, one each per primary patrol shift. (See p. 36.)

2. Increase minimum staffing levels of patrol shifts by one police officer for the hours specified in this report. (See p. 36.)

3. Consider establishing a Police Service Officer classification, staffing for which would include two new FTEs and the upgrade of two Community Service Officers (CSOs). PSOs would be assigned to the patrol function, with duties that include those of existing patrol CSOs plus added responsibilities of transport/booking of prisoners. (See p. 36.)

4. Over a three-month period, assess the number of calls for service handled by patrol officers that are deemed appropriate for assignment to a CSO. If sufficient numbers exist to warrant additional CSO staffing, submit budget requests to hire appropriate numbers of CSO staff. (See p. 36.)

5. Consider expanding the utilization of K9 units in handling of calls for service. (See p. 36.)

6. Examine causative factors contributing to the extraordinary rate of out-of-service time. (See p. 36.)

7. Examine shift deployment schedules and adjust as necessary to better align available personnel to workload demands. (See p. 36.)

CSO Recommendations

8. Expand the role of CSOs in response to traffic collisions and other appropriate duties. (See p. 42.)

9. Expand the Community Service Officer complement to eight authorized positions, with the end goal of incorporating Police Service Officers into the staffing complement. Ultimately, the complement would include four CSOs and four PSOs. (See p. 42.)

Traffic Recommendations

10. Increase FTE staffing by three motor officers to allow for staffing during evening commute times as well as limited weekend deployments. (See p. 49.)

11. Reconsider the practice of granting motorcycle officers a one-hour maintenance period per day to conduct activities largely limited to checking engine oil, tire air pressure, and light cleaning, duties that should take only minutes. (See p. 49.)

12. Examine causative factors contributing to high levels of out-of-service time. (See p. 49.)

Support Bureau Recommendations

Investigations Recommendations

13. A clear policy that outlines department case screening criteria and those accountable for such screening should be developed and approved by department command staff. (See p. 55.)

14. The case screening flow chart recently developed by CPD should be considered as part of policy development. (See p. 55.)

15. A policy should be developed that requires that NETRMS be utilized by department managers and supervisors to assess individual and unit workload. (See p. 55.)

16. Develop benchmarks to track individual investigation progress from assignment to include case closure standards and required approvals. (See p. 55.)

17. Extract case information from NETRMS and massage this information into relevant and timely management reports for investigative supervisors and department managers so they may analyze and evaluate the effectiveness of the department's investigative function. (See p. 55.)

18. Continue to evaluate NETRMS data for clarity and consistency to ensure input provides a level of confidence in the resulting output for caseload assessment and analysis of the investigative function. (See p. 55.)

19. CPSM recommends the addition of one General Investigations detective in order to reduce the annual detective caseload average from 209 to 167. (See p. 55.)

20. CPSM recommends the addition of one Family Services detective in order to reduce the annual detective caseload average from 218 to 163. (See p. 55.)

21. Management in Investigations should review case clearance rates to assess bureau effectiveness in solving crime and the effectiveness of individual detectives. (See p. 55.)

22. Periodic training for Records and Investigators staff is recommended regarding FBI case clearance guidelines to ensure correct reporting of UCR statistics. (See p. 55.)

Communications Recommendations

23. Ensure that reliance upon supervisors to intermittently perform line duties does not interfere with them performing their role as supervisors. (See p. 65.)

24. Ensure all department personnel are required to reflect their department cell phone number on their business cards to aid in reducing the number of calls handled by Communications. (See p. 65.)

25. Require that each officer regularly reviews and responds to phone messages. (See p. 65.)

26. Communications PRA requests should be absorbed by the CPSM-recommended Discovery Unit (see Records Division section of this report for detail). (See p. 65.)

27. As new technology tools are deployed in the future, evaluate Communications staffing levels to meet increased workload to potentially include a "technology" desk. (See p. 65.)

28. A team from Communications and Operations should jointly examine ways to reduce dispatch delays of all calls to field units. (See p. 65.)

Homeless Outreach Team Recommendations

29. CPSM recommends the HOT staff be assigned for five-year periods to enhance staff relationships with clientele served. (See p. 68.)

30. HOT members should consider identifying and prioritizing intervention with homeless individuals who generate the greatest number of calls for services to reduce costs to the city and improve quality of life. (See p. 68.)

31. The HOT should accurately track its efforts in both qualitative and quantitative terms. (See p. 69.)

32. CPSM recommends creating three HOT teams consisting of a police officer and a licensed clinical social worker to support patrol and HOT personnel; this would require an additional police officer FTE and three LCSW FTEs. (See p. 69.)

33. With the increase in HOT team size, adding a sergeant to supervise the teams is recommended. (See p. 69.)

34. Carlsbad's administrators and elected officials should continually monitor the department's and city's efforts to address the homeless situation to ensure the city is providing the appropriate level of services and meeting the expectations of the community. (See p. 69.)

Records Recommendations

35. The department should consider developing a section within the policy manual specific to the Records function. (See p. 76.)

36. Records should also develop a procedural manual for staff reference, improved consistency, and guidelines for new employees. (See p. 76.)

37. The report deferral policy must be followed and communication improved between Records and patrol supervisors to address this issue. (See p. 76.)

38. The requirement that the E-tickets be cut to a particular size by Records staff as requested by the Court should be reviewed as a seemingly unnecessary task. (See p. 76.)

39. Consideration should be given to assigning a Community Service Officer position to the public counter to address department inquiries. (See p. 76.)

40. An additional FTE should be funded and assigned to Records to allow the current P/E FTE to concentrate on P/E responsibilities on a full-time basis. (See p. 76.)

41. For the establishment of a "Discovery Unit" within Records to centralize the tasks required for completion of judicial and PRA requests, recommended initial staffing should be not less than 1.0 civilian FTEs. This staffing level assumes this unit will undertake the workload presently spread through the department. (See p. 76.)

42. CPSM recommends a Records Supervisor position be assigned to Records to lessen the manager's workload to allow for appropriate management oversight. (See p. 76.)

43. CPSM recommends frequent training be provided to appropriate staff to ensure the correct criteria is adhered to in reporting of UCR crime and clearances. (See p. 76.)

44. CPSM recommends here, as in Communications, that CPD should ensure all personnel are required to reflect their department cellphone number on their business cards, and that each officer be required to regularly review and respond to phone messages. (See p. 76.)

45. CPSM recommends the CPD eliminate the acceptance of cash at its public window as a payment option for department services or records. (See p. 76.)

SECTION 2. METHODOLOGY

Data Analysis

CPSM used numerous sources of data to support our conclusions and recommendations for the Carlsbad Police Department. Information was obtained from the FBI Uniform Crime Reporting (UCR) Program, Part I offenses, along with numerous sources of internal information. UCR Part I crimes are defined as murder, rape, robbery, aggravated assault, burglary, larceny-theft, and larceny of a motor vehicle. Internal sources included data from the computer-aided dispatch (CAD) system for information on calls for service (CFS).

Document Review

CPSM consultants were furnished with numerous reports and summary documents by the Carlsbad Police Department. Information on strategic plans, personnel staffing and deployment, monthly and annual reports, operations manuals, intelligence bulletins, evaluations, training records, and performance statistics were reviewed by project team staff. Follow-up phone calls were used to clarify information as needed.

Interviews

This study relied extensively on intensive interviews with personnel. On-site and in-person interviews were conducted with all relevant bureau/section commanders regarding their operations.

Operational/Administrative Observations

Over the course of the evaluation period, numerous observations were conducted. These included observations of general patrol; investigations; support services such as records, communications, property and evidence; and administrative functions. CPSM representatives engaged all facets of department operations from a "participant observation" perspective.

Staffing Analysis

In virtually all CPSM studies, we are asked to identify appropriate staffing levels. For this study, that is the exclusive study objective. In the following subsections, we will extensively discuss workload, operational and safety conditions, and other factors to be considered in establishing appropriate staffing levels. Staffing recommendations are based upon our comprehensive evaluation of all relevant factors.

SECTION 3. DEPARTMENT STAFFING

The following table displays the authorized staffing levels for the department for FY 2015 through 2019. Staffing levels will be addressed throughout the report as we discuss specific operating sections. This table is examines staffing levels/changes for the past five years, as well as vacancies at present.

TABLE 3-1: Authorized Staffing Levels for Fiscal Years 2015-2019

Position	2015	2016	2017	2018	2019	Vacant
Sworn Positions (as of 4/2/2019)						
Chief	1	1	1	1	1	
Assistant Chief	0	0	0	0	1	
Captain	2	2	2	2	2	
Lieutenant	7	7	7	7	8	
Sergeant	15	15	15	15	15	
Officer	88	88	88	90	93	2
Sworn Total	**113**	**113**	**113**	**115**	**120**	**2**
Civilian Personnel						
Administrative Secretary	1	1	1	1	1	
Office Specialist	1	1	1	1	1	
Senior Management Analyst	1	1	1	1	1	
Crime Analyst	1	1	1	1	1	
Records - Property/Evidence Manager	1	1	1	1	1	
Records Specialists	4	4	4	4	4	
Property and Evidence Technician	2	2	2	2	2	
Communications Manager	1	1	1	1	1	
Dispatch Supervisor	4	4	4	4	4	
Dispatcher	16	16	16	16	16	
Community Relations Manager	1	1	1	1	1	
Juvenile Justice Coordinator	1	1	1	1	1	
Training Coordinator	1	1	1	1	1	
Administrative Assistant (part-time)	2	2	2	2	2	
Community Services Officer	11	11	11	11	11	
Ranger	0	0	0	2	2	
Cal ID Techs	2	2	2	2	2	
Civilian Total	**50**	**50**	**50**	**52**	**52**	
Total Authorized Personnel	**163**	**163**	**163**	**167**	**172**	

Source: Carlsbad PD

SECTION 4. REPORTED CRIME DATA

While communities differ from one another in population, demographics, geographical landscape, and social-economic distinctions, comparisons to other jurisdictions can be helpful in illustrating how crime rates in the City of Carlsbad measure against those of other local California agencies as well as the State of California and the nation overall.

The FBI's Uniform Crime Reporting (UCR) Program assembles data on crime from police departments across the United States; the reports are utilized to measure the extent, fluctuation, and distribution of crime. For reporting purposes, criminal offenses are divided into two categories: Part 1 offenses and Part 2 offenses. In Part 1 offenses, representing the most serious crimes, the UCR indexes incidents in two categories: violent crimes and property crimes. Violent crimes include murder, rape, robbery, and aggravated assault. Property crimes include burglary, larceny, and motor vehicle theft. Crime rates are expressed (indexed) as the number of incidents per 100,000 population to allow for comparison.

Data acquired by CPSM from the FBI for use in this reporting reflects the most currently available information (2017). As indicated in Table 4-1, in 2017, the Carlsbad Police Department reported a UCR Part I violent crime rate of 214 (indexed) and a property crime rate of 1,915 (indexed).

In comparing Carlsbad Police Department data with other California cities and the nation, one can see Carlsbad reports below-average rates compared to statewide and national figures for both violent crime and property crime. Property crime rates in this case are largely driven by larceny offenses, including shoplifting.

TABLE 4-1: Reported Crime Rates by Jurisdiction, Per 100,000*, 2017

City	State	Population	Crime Rates		
			Violent	Property	Total
Buena Park	CA	83,552	349	3,368	3,717
Chula Vista	CA	271,109	298	1,432	1,730
Costa Mesa	CA	113,267	319	3,795	4,114
El Cajon	CA	104,447	411	2,231	2,642
Escondido	CA	152,845	377	1,704	2,081
Fullerton	CA	141,637	207	2,790	2,997
Hemet	CA	85,166	537	3,643	4,180
Indio	CA	90,055	710	2,540	3,250
Menifee	CA	90,403	136	2,181	2,317
Murrieta	CA	113,016	71	1,400	1,471
Newport Beach	CA	86,910	143	2,443	2,586
Orange	CA	141,130	154	1,831	1,985
Tustin	CA	81,246	162	2,399	2,561
Westminster	CA	91,863	306	3,075	3,381
Carlsbad	**CA**	**115,344**	**214**	**1,915**	**2,129**
California		**39,536,653**	**449**	**2,497**	**2,946**
National		**325,719,178**	**383**	**2,362**	**2,745**

*Indexed per 100,000 population. Source: FBI Uniform Crime Report.

Table 4-2 shows the actual number of offenses. In this table, we included data for 2018, which was provided by the department, as the 2018 data is not yet available from the FBI UCR. As can be seen, while rates vary by category, the total number of incidents has been relatively unchanged over the past three years.

TABLE 4-2: Carlsbad Police Department Reported Actual Part 1 Offenses, 2016 to 2018*

Crime	2016	2017	2018*
Murder/ Manslaughter	2	0	2
Rape	26	30	39
Robbery	55	46	52
Aggravated Assault	182	171	151
Burglary	497	432	299
Larceny	1463	1638	1649
Vehicle Theft	149	139	152
Total	**2,374**	**2,456**	**2,344**

***Note:** FBI data for 2018 not yet available. Data for 2018 provided by CPD.

Figure 4-1 reflects the trend in Part 1 crime over the past ten years. It shows that both violent crime and property crime fluctuated somewhat between 2008 and 2017, but largely trended downward, though slight increases are noted over the past three years. The highest violent crime rate of this period occurred in 2009 at 291 (indexed). The lowest rate, at 151 (indexed), occurred in 2015. For 2017, the rate was 214 (indexed). As noted, property crime also trended downward over this period. The highest property crime rate occurred in 2008 at 2,414 (indexed), with the low of 1,541 (indexed) in 2014. These rates largely follow state and national trends, which generally show declines in both violent and property crime over the referenced ten-year period.

FIGURE 4-1: Carlsbad Reported Violent and Property Crime Rates, by Year
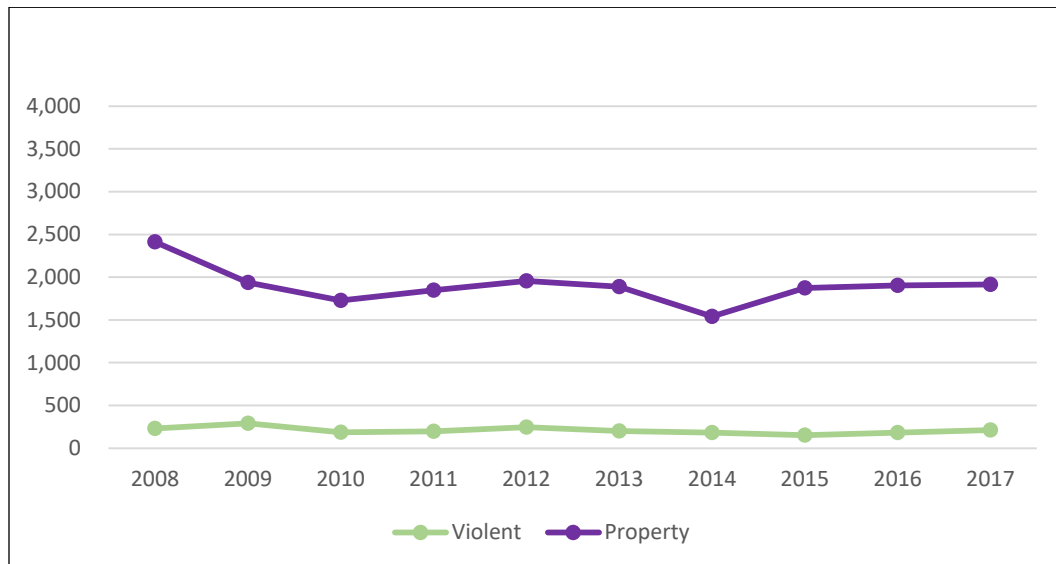
Figure 4-2 shows a comparison of combined violent and property crime rates for both Carlsbad and the State of California for the period of 2008 through 2017. It reflects the observations made in Figure 3-1 and in Table 3-3 (which follows), notably, that crime has trended downward for Carlsbad as well as the State of California over a ten-year window. As previously noted, however, over the past few years there has been a slight increase in the rate of crime in Carlsbad. That is the case relative to violent crime in the state and nation as well.

FIGURE 4-2: Reported City and State Crime Rates, by Year
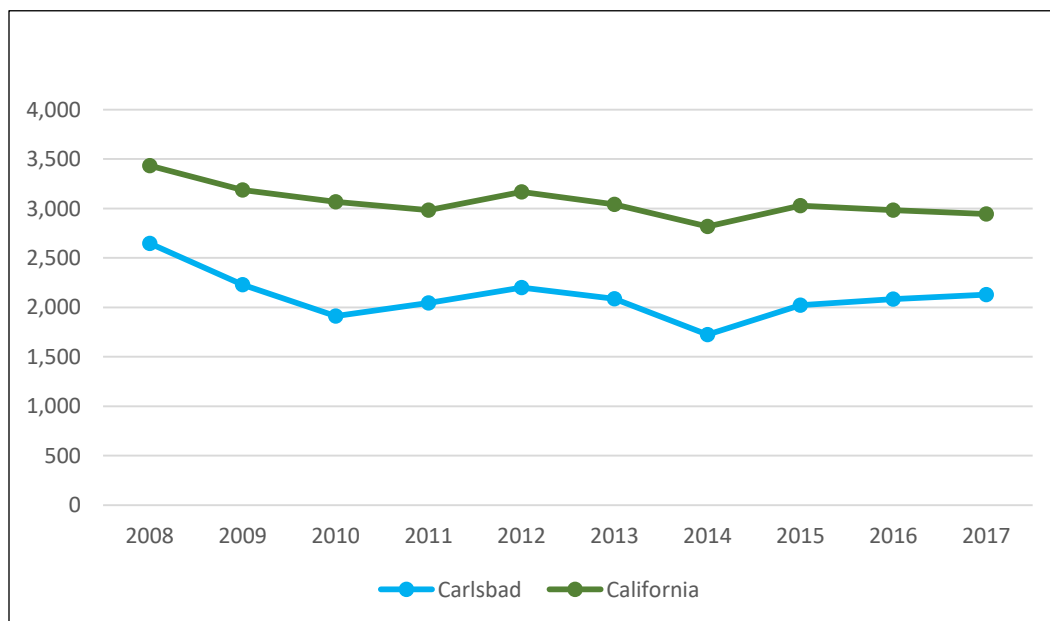
Table 4-3 compares Carlsbad crime rates to both the state and national rates year by year for the period 2007 through 2016. Again, this data is indexed per 100,000 population. It is provided for illustration purposes only.

TABLE 4-3: Reported Municipal, State, and National Crime Rates, by Year, 2008-2017*

Year	Carlsbad				California				National			
	Population	Violent	Property	Total	Population	Violent	Property	Total	Population	Violent	Property	Total
2008	97,670	232	2,414	2,647	36,876,276	502	2,931	3,433	309,327,055	438	3,055	3,493
2009	98,482	291	1,937	2,229	37,061,435	471	2,717	3,188	312,367,926	416	2,906	3,322
2010	105,328	185	1,728	1,913	37,346,022	439	2,629	3,068	314,170,775	393	2,833	3,225
2011	106,566	197	1,849	2,046	37,819,249	410	2,574	2,983	317,186,963	376	2,800	3,176
2012	107,879	246	1,955	2,201	38,183,375	421	2,747	3,169	319,697,368	377	2,758	3,135
2013	110,505	200	1,887	2,087	38,498,377	394	2,646	3,041	321,947,240	362	2,627	2,989
2014	112,297	182	1,541	1,723	38,970,399	389	2,430	2,819	324,699,246	357	2,464	2,821
2015	113,972	151	1,872	2,023	39,315,550	424	2,605	3,029	327,455,769	368	2,376	2,744
2016	115,040	182	1,902	2,084	39,421,283	443	2,541	2,984	329,308,297	383	2,353	2,736
2017	115,344	214	1,915	2,129	39,536,653	449	2,497	2,946	325,719,178	383	2,362	2,745

*Indexed per 100,000 population. Source: FBI Uniform Crime Report.

SECTION 5. OPERATIONS BUREAU

The Carlsbad Police Department Operations Bureau provides the community with a full range of police services, including responding to emergencies and calls for service (CFS), performing directed patrol activities, engaging in neighborhood problem solving, and traffic enforcement. The bureau is comprised of two divisions: Patrol and Traffic. While each is integrally involved in supporting the other, we will address both functions separately. Reporting on each separately allows the reader to better comprehend each function and its independent as well as collective value in providing policing services to the City of Carlsbad.

The Operations Bureau serves under the direction of a captain who reports directly to the Assistant Chief of Police. Five lieutenants are assigned to Operations Bureau, four in patrol (one for each primary patrol team) and one to traffic.

PATROL DIVISION

Uniformed patrol is considered the "backbone" of American policing. Officers assigned to this important function are the most visible members of the department and command the largest share of resources committed by the department. Proper staffing and allocation of these resources is critical to ensuring that the department is capable of both timely and efficient response to emergency calls as well providing general law enforcement services to the public.

Patrol Division Staffing/Schedule

Patrol is comprised of an authorized complement of four lieutenants, eight sergeants, fifty- six patrol officers, four K9 officers, six community service officers, and two rangers. This complement of personnel is responsible for 24/7 policing services in the City of Carlsbad. Table 5-1 reflects this alignment and the present staffing status by category. These numbers may adjust frequently.

TABLE 5-1: Operations Bureau Patrol Authorized Staffing Levels for FY 2018/2019

Position	Authorized FY 2018/2019	FTO Trainees*	Leave or Light Duty	Vacancies (4/2/19)
SWORN PERSONNEL				
Lieutenant	4			
Sergeant	8			
Officer	56	6	2	4**
K9	4		1	
Sworn Total	**72**	**6**	**3**	**4**
CIVILIAN PERSONNEL				
Community Service Officer	6			1
Ranger	2			1
Civilian Total	**8**			**2**
Total Authorized Personnel	**80**	**6**	**3**	**6**

*Trainees assigned to FTO are not considered full service or as part of minimum staffing per department practice. **Two laterals are pending hire and two academy trainees in process.

Supervision

It is common policing practice at agencies of Carlsbad's size and staffing alignment that a lieutenant serves as the patrol "watch commander." In doing so, lieutenants spend much of their time in the station handling various administrative duties related to patrol shift operations As well, they are heavily burdened with collateral duties including project research, personnel mentoring/development, performance reviews, administrative reports, and attendance at both community and department meetings. After normal business hours the watch commander becomes the functional supervisor of all department operations, including 911/communications, Records, etc. Additional, though limited time, is spent in the field. In the absence of a lieutenant, sergeants may serve in the capacity of watch commander.

Sergeants, on the other hand, are generally responsible for field supervision and serve as additional staffing in support of patrol officers during especially busy periods. They provide for a critical need in directing and supervising field operations on a 24/7 basis. Absence of adequate and proactive field supervision in policing creates significant liability for an agency. We will discuss staffing levels for sergeants in the patrol summary subsection.

Deployment Schedule

Personnel work a 12-hour day and alternate working three and four-day work weeks per their MOU. Generally, Wednesday shifts are eight hours in duration. This schedule ensures personnel reach 160 work hours in the 28-day cycle. One day and one night shift team work Sunday to Wednesday, the second day and night teams work Wednesday to Sunday, again, with alternate Wednesdays off. Four cover teams of officers work a morning and evening mid-shift for each day and night team. This ensures some coverage during primary shift changes. Table 5-2 reflects this alignment, along with minimum staffing. Actual numbers change frequently.

TABLE 5-2: Deployment Schedule / Minimum Staffing

Watch	Hours	Work Days	Lt.*	Sgt.	PO	Actual**	Min. Staffing
Day 1	0400X1600	Su, M, Tu	1	2	7	6	8
Cover D-1	0600X1800				6	4	
Day 2	0400x1600	Th, F, Sa	1	2	7	5	8
Cover D-2	0600x1800				6	5	
Eve 1	1600x0400	Su, M, Tu	1	2	11	8	9
Cover E-1	1700x0500				3	3	
Eve 2	1600x0400	Th, F, Sa	1	2	13	10	12
Cover E-2	1700x0500				4	3	
Total			4	8	56	44	N/A

* Lieutenants are designated as watch commanders and work three 12-hour shifts each week, with an 8-hour shift on alternating Wednesdays, as do sergeants and officers. They have the flexibility to stagger their start times to meet the operational needs of the watch, as do sergeants and patrol officers. ** Does not include FTO Trainees.

Staffing levels are affected by both the number of officers assigned to the patrol function as well as the impact of time off associated with vacations, training, court appearances, FMLA, and illness/injury, etc. In general, the combination of these leave factors results in officers being unavailable for a shift at a rate of 25 percent of the time. For instance, while a team may be staffed with twelve officers, only nine may report to work due to various leave factors.

Minimum Staffing

Virtually all agencies establish minimum staffing levels for patrol functions. The primary reasons include ensuring that sufficient resources are available to respond to emergency calls for service, ensure that sufficient resources are available to provide for the safety of the community and the department's deployed staff, and ensure that resources are available to handle the volume of workload common in the community. As such, minimum staffing will vary from agency to agency based both upon the size of the agency, and the nature and volume of workload. It is often a subjective decision made by the department's leadership team.

The department has established a minimum staffing level of eight officers on day shift, nine on Sunday through Thursday evenings, and twelve on Thursday through Saturday evenings. The minimum staffing is an informal standard since neither department policy nor the collective bargaining agreements for impacted employees reference minimum staffing. This is appropriate, as the Police Chief must have the flexibility to adjust minimum staffing based upon ever-changing workload conditions.

Over the two-year period of 2017 through 2018, the department reported hiring officers to meet minimum staffing an average of 2,232 hours per year. It is estimated that the overtime costs associated with minimum staffing near or exceed $200,000 per year. While this exceeds an FTE amount of 2,080 hours by 152 hours, the time period in which officers must be hired on overtime to meet minimum staffing requires factoring in a 24-hour day, 365 days per year (8,760 hours). As such, hiring to meet minimum staffing practices occurred roughly 26 percent of all deployment hours. Therefore, the hiring of an FTE to cover hours requiring minimum staffing is impractical.

The department does not include K9 officers or trainees assigned to an FTO program as part of its minimum staffing complement. While some but not all police departments do not include trainees as part of minimum staffing, it is unusual that K9 officers are not included. As noted, minimum staffing levels are established to address the need to have sufficient personnel available to respond to emergency calls for service, and to ensure community and officer safety. We submit that no regular duties of the K9 officers should interfere with responses to these types of needs, and as such, they should be included in minimum staffing counts. However, given the limited role they have in terms of calls for service response, they do not significantly impact workload carried by patrol officers.

It is important to keep in mind that minimum standards are just that, minimums, not optimal. Minimums simply establish a reasonable number of personnel available to generally ensure citizen and officer safety and the ability to respond to emergency calls for service in a timely manner. Minimum staffing numbers do not allow for routine proactive policing, problem solving, and timely response to non-emergency calls.

As we explore deployment and workload later in this section, we will identify actual staffing levels (personnel that are on-duty at any given time period) and compare those against workload demands.

Call / Workload Demand

As noted in the Executive Summary, our work followed two tracks: (1) the operational assessment, and (2) a data analysis of workload, primarily related to Operations Bureau functions. For this study, at the request of the department, we have separated our workload assessment of the Operations Bureau into three reporting areas: Patrol, Patrol CSO, and Traffic.

In the following pages, we draw upon the data analysis report to assist in our operational assessment. The data analysis report, in full, can be found following the operational assessment and readers are encouraged to thoroughly review it. The data analysis is rich with information, only a portion of which is included in this segment of the report. For purposes of our analysis, we use computer-aided dispatch (CAD) records supplied by the department's dispatch center. These records pertain to identifiable workload associated with specific units and are the most accurate, verifiable, and comprehensive records available.

Crime statistics for the City of Carlsbad indicate a below average level of both violent and property crimes in comparison to the State of California and national levels. These figures were discussed in Section 4 and depicted in Tables 4-1 and 4-3. While slight fluctuations have occurred, crime has been trending downward over the past ten years, following a national path that began in the 1990s. But as previously noted, overall crime rates have inched slightly higher over the past few years, especially relative to violent crime.

Prevention of crime and the apprehension of criminals are at the forefront of responsibilities for police departments, but demands on police resources involve much more than crime. Traffic enforcement, the efficient flow of traffic through the community, and maintaining peace and order are but a few of the many such noncrime activities that fall into the scope of work of a police department. As we examine workload demands we will explore all activities.

Table 5-3 presents information on the main categories of calls for service the department handled during the study period of January 1, 2018 through December 31, 2018.

The 911/dispatch center recorded approximately 51,623 events that were assigned call numbers and which include an adequate record of a responding unit. When measured daily, the department reported an average of 141.4 patrol-related events per day. The data that follows in Table 5-3 eliminates events for directed patrol or out-of-service activities rather than specific calls. Other events had fewer than 30 seconds spent on the call (indicating the call had been canceled) or lacked arrival times or other pertinent call information. Excluding these categories, the analysis focused on the remaining 39,850 calls for service. The data includes both officer-initiated activity and community-initiated activity, e.g., residents, alarm companies, transfers from other law enforcement agencies, etc.

Again, these figures only represent the main patrol workload. Additional event and call data relative to Traffic and CSO workload will be reported upon separately.

TABLE 5-3: Calls per Day, by Category

Category	No. of Calls	Calls per Day
911 hang up	317	0.9
Accident	1,296	3.6
Alarm	3,481	9.5
Animal	172	0.5
Assist other agency	1,065	2.9
Check	4,914	13.5
Crime–person	1,529	4.2
Crime–property	3,031	8.3
Disturbance	4,210	11.5
Investigation	1,338	3.7
Miscellaneous	1,388	3.8
Public contact	4,452	12.2
Suspicious incident	4,202	11.5
Traffic enforcement	8,455	23.2
Total	**39,850**	**109.2**

Note: The focus here is on recorded calls rather than recorded events. We removed 749 events with zero time on scene, 3,813 out of service, and 7,211 directed patrol activities.

In total, officers were involved in 39,850 calls during the 12-month study period, an average of 109.2 calls per day, or 4.5 per hour. The top four categories of calls accounted for 59 percent of all calls: 24 percent of calls were traffic-related, 12 percent were checks, 11 percent were crimes, and 11 percent were public contact checks.

In Table 5-4 we examine both the origin of the call and the average time spent on a call by the primary unit. Community-initiated calls include calls from citizens, businesses, alarm companies, transfers from other law enforcement agencies, etc. Police-initiated refers to calls generated by a patrol officer or other Carlsbad police employees.

TABLE 5-4: Primary Unit's Average Occupied Times, by Category and Initiator

Category	Community-initiated		Police-initiated	
	Minutes	Calls	Minutes	Calls
911 hang up	14.3	317	NA	0
Accident	50.2	1,190	32.6	106
Alarm	17.0	3,477	10.5	4
Animal	20.6	167	23.1	5
Assist other agency	33.7	985	22.1	80
Check	31.0	3,792	33.0	1,122
Crime–person	67.8	1,454	91.0	74
Crime–property	46.4	2,910	43.6	121
Disturbance	40.5	3,919	38.9	291
Investigation	55.3	1,215	30.9	123
Miscellaneous	29.3	1,123	42.3	264
Public contact	29.5	2,495	23.8	1,955
Suspicious incident	27.2	2,860	16.6	1,341
Traffic enforcement	25.6	2,327	15.0	6,128
Weighted Average/Total Calls	**34.8**	**28,231**	**20.8**	**11,614**

Note: Here again, the information is limited to calls and excludes all events involving out of service time, directed patrol, and that show zero time on scene. A unit's occupied time is measured as the time from when the unit was dispatched until the unit becomes available again. The times shown are the average occupied minutes per call for the primary unit, rather than the total occupied minutes for all units assigned to a call.

In Tables 5-5 and 5-6 we look at the average number of police units that responded to an activity. Generally, as CPD deploys one-officer units, that translates to the average number of officers that responded. The information in these tables is limited to calls and excludes all events that show zero time on scene, directed patrol, and out of service.

TABLE 5-5: Average Number of Responding Units, by Initiator and Category

Category	Community-initiated		Police-initiated	
	No. of Units	Calls	No. of Units	Calls
911 hang up	1.9	317	NA	0
Accident	2.3	1,190	1.8	106
Alarm	2.2	3,477	2.0	4
Animal	1.4	167	1.2	5
Assist other agency	2.4	985	1.5	80
Check	2.1	3,792	1.3	1,122
Crime–person	2.4	1,454	2.6	75
Crime–property	1.7	2,910	1.7	121
Disturbance	2.4	3,919	2.1	291
Investigation	2.7	1,215	1.6	123
Miscellaneous	1.2	1,124	1.8	264
Public contact	1.8	2,497	1.7	1,955
Suspicious incident	2.3	2,861	1.7	1,341
Traffic enforcement	1.5	2,327	1.4	6,128
Weighted Average/Total Calls	**2.1**	**28,235**	**1.5**	**11,615**

TABLE 5-6: Number of Responding Units, by Category, Community-initiated Calls

Category	Responding Units		
	One	Two	Three or More
911 hang up	67	207	43
Accident	370	388	432
Alarm	272	2,383	822
Animal	115	46	6
Assist other agency	193	416	376
Check	866	2,052	874
Crime–person	514	423	517
Crime–property	1,730	784	396
Disturbance	519	2,012	1,388
Investigation	375	359	481
Miscellaneous	990	105	29
Public contact	973	1,115	409
Suspicious incident	421	1,637	803
Traffic enforcement	1,569	532	226
Total	**8,974**	**12,459**	**6,802**

Note: The overall mean number of responding units was 2.1 for community-initiated calls and 1.5 for police-initiated calls. Thirty-two percent of community-initiated calls involved one responding unit, 42 percent of community-initiated calls involved two responding units, and 24 percent of community-initiated calls involved three or more responding units. The largest group of calls with three or more responding units involved crimes.

Out-of-service Activities

In the period from January 1, 2018, through December 31, 2018, the dispatch center recorded out-of-service activities. While some activities were assigned a call number, there were also activities that were not assigned a call number. We combined both types of out-of-service activities to analyze them. It is important to note that while we do not include out-of-service activities as calls for service in reporting to this point, we do include these activities in the overall workload when comparing the total workload against available personnel in winter and summer periods to follow.

We focused on those activities that involved a patrol unit. We also limited our analysis to activities that occurred during shifts where the same patrol unit was also responding to calls for service. Each record only indicates one unit per activity. There were a few problems with the data provided and we made assumptions and decisions to address these issues:

- We excluded activities that lasted less than 30 seconds. These are irrelevant and contribute little to the overall workload.

- Another portion of the recorded activities lasted more than eight hours. As an activity is unlikely to last more than eight hours, we assumed that these records were inaccurate.

- After these exclusions, 19,036 activities remained. These activities had an average duration of 43.8 minutes.

In Table 5-7, we report out-of-service activities and workload by type of activity. In reporting to follow, we include these activities in the overall workload when comparing the total workload against available personnel in winter and summer.

TABLE 5-7: Out-of-service Activities and Occupied Times by Description

Description	Occupied Time	Count
At Station	42.1	815
Car Wash	14.2	954
City Yard	25.2	68
Court	122.6	57
Enroute Out of Service	16.9	261
Meeting	57.8	500
Office Routine	70.5	1,790
Officer Training	68.0	1,572
Out of Car	21.7	2,191
Out of Service	39.3	438
Range	90.5	31
Reports	41.9	8,130
Administrative - Weighted Average/Total Activities	**43.5**	**16,807**
Meal Break	46.3	2,229
Weighted Average/Total Activities	**43.8**	**19,036**

To this point, we have discussed authorized and actual (authorized minus vacancies) staffing levels, and total call volume for calendar year 2018. As we noted, authorized and/or actual staffing levels do not reflect the number of personnel who report to work on a given day. As

previously reported, that number is reduced from authorized/actual numbers due to vacation, training, illness, FMLA, military leave, etc. In reporting to follow, we will examine workload based upon available workforce as deployed by shift.

Analysis of Patrol Deployment vs. Workload Demand

As previously mentioned, uniformed patrol is considered the "backbone" of American policing. Proper staffing and allocation of these resources is critical to have officers available to respond to calls for service and provide law enforcement services to the public.

Although some police administrators suggest that there are national standards for the number of officers per thousand residents that a department should employ, that is not the case. The International Association of Chiefs of Police (IACP) states that ready-made, universally applicable patrol staffing standards do not exist. Furthermore, ratios such as officers-per-thousand population are inappropriate to use as the basis for staffing decisions.

According to *Public Management* magazine, "A key resource is discretionary patrol time, or the time available for officers to make self-initiated stops, advise a victim in how to prevent the next crime, or call property owners, neighbors, or local agencies to report problems or request assistance. Understanding discretionary time, and how it is used, is vital. Yet most police departments do not compile such data effectively. To be sure, this is not easy to do and, in some departments may require improvements in management information systems."[1]

Essentially, "discretionary time" on patrol is the amount of time available each day where officers are not committed to handling CFS and workload demands from the public. It is "discretionary" and intended to be used at the discretion of the officers to address problems in the community and be available in the event of emergencies. When there is no discretionary time, officers are entirely committed to service demands, do not get the chance to address other community problems that do not arise through 911, and are not available in times of serious emergency. The lack of discretionary time indicates a department is understaffed. Conversely, when there is too much discretionary time, officers are idle. This may be an indication that the department is overstaffed.

Staffing decisions, particularly for patrol, must be based on actual workload as well as ensuring that sufficient staffing exists to respond to emergency situations involving the safety of the public and officers alike. Once the actual workload is determined, and the amount of discretionary time is determined, then staffing decisions can be made consistent with the department's policing philosophy and the community's ability to fund service. The Carlsbad Police Department is a full-service police department, and its philosophy is to address essentially all requests for service in a community policing style. With this in mind it is necessary to look at workload to understand the impact of this style of policing in the context of community demand.

To understand actual workload (the time required to complete certain activities), it is critical to review total reported events within the context of how the events originated, such as through directed patrol, administrative tasks, officer-initiated activities, and citizen-initiated activities. Analysis of this type enables identification of activities that are really "calls" from those activities that are some other type of event.

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1. John Campbell, Joseph Brann, and David Williams, "Officer-per-Thousand Formulas and Other Policy Myths," Public Management 86 (March 2004): 22–27.

In general, a "Rule of 60" can be applied to evaluate patrol staffing. This rule has two parts. The first part states that 60 percent of the sworn officers in a department should be dedicated to the patrol function (patrol staffing) and the second part states that no more than 60 percent of their time should be committed to calls for service. This commitment of 60 percent of their time is referred to as the patrol saturation index.

The Rule of 60 is not a hard-and-fast rule, but rather a starting point for discussion on patrol deployment. Resource allocation decisions must be made from a policy and/or managerial perspective through which costs and benefits of competing demands are considered. The patrol saturation index indicates the percentage of time dedicated by police officers to public demands for service and administrative duties related to their jobs. Effective patrol deployment would exist at amounts where the saturation index was less than 60.

This Rule of 60 for patrol deployment does not mean the remaining 40 percent of time is downtime or break time. It reflects the extent to which patrol officer time is saturated by calls for service. The time when police personnel are not responding to calls should be committed to management-directed operations. This is a more focused use of time and can include supervised allocation of patrol officer activities toward proactive enforcement, crime prevention, community policing, and citizen safety initiatives. It will also provide ready and available resources in the event of a large-scale emergency.

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

Understanding the difference between the various types of police department events and the resulting staffing implications is critical to determining deployment needs. This portion of the study looks at the total deployed hours of the police department with a comparison to current time spent to provide services.

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

From an officer's standpoint, once a certain level of CFS activity is reached, the officer's focus shifts to a CFS-based reactionary mode. Once that threshold is reached, the patrol officer's mindset begins to shift from one that looks for ways to deal with crime and quality-of-life conditions in the community to one that continually prepares for the next call. After saturation, officers cease proactive policing and engage in a reactionary style of policing. The outlook becomes, "Why act proactively when my actions are only going to be interrupted by a call?" Any uncommitted time is spent waiting for the next call. Sixty percent of time spent responding to calls for service is believed to be the saturation threshold.

Rule of 60 – Part 1

According to the department personnel data available at the time of the site visit (April 2019), the department is authorized for 120 full-time sworn officers. When fully staffed, 72 of those personnel are assigned to patrol functions (includes lieutenants, sergeants, and officers/patrol and K9). When fully staffed, patrol staffing would thus represent 60 percent of total sworn staffing, meeting CPSM's Rule of 60 recommendation.

Rule of 60 – Part 2

The second part of the "Rule of 60" examines workload and discretionary time and suggests that no more than 60 percent of time should be committed to calls for service and self-initiated arrests, etc. In other words, CPSM suggests that no more than 60 percent of available patrol officer time be spent responding to the service demands in the community. The remaining 40 percent of the time is the "discretionary time" for officers to be available to address community problems and be available for serious emergencies. This Rule of 60 for patrol deployment does not mean the remaining 40 percent of time is downtime or break time. It is simply a reflection of the point at which patrol officer time is "saturated" by CFS.

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

Departments must be cautious in interpreting the SI too narrowly. For example, one should not conclude that SI can never exceed 60 percent at any time during the day, or that in any given hour no more than 60 percent of any officer's time be committed to CFS. The SI at 60 percent is intended to be a benchmark to evaluate overall service demands on patrol staffing. When SI levels exceed 60 percent for substantial periods of a given shift, or at isolated but consistent and specific times during the day, then decisions should be made to reallocate or realign personnel to reduce the SI to levels below 60. Lastly, this is not a hard-and-fast rule, but a benchmark to be used in evaluating staffing decisions. Other factors such as the availability of sufficient resources to safely, efficiently, and effectively respond to emergency calls for service must be considered.

Examination of Patrol Deployment vs. Workload Data

While the call data referenced in Tables 5-3 to 5-7 reflects call activity for the entire one-year study period, for next portion of the study we drill down to examine not just the total number of calls, but the actual time spent on these calls, other related duties, and available staffing.

Here, we examine deployment information for eight weeks in winter (January 4 through February 28, 2018) and eight weeks in summer (July 7 through August 31, 2018). We compare "all" workload, which includes other-initiated calls, police-initiated calls, directed patrol work, and out-of-service activities.

In Figures 5-1 through 5-12 that will follow, our analysis examines solely the department's main patrol deployment (added patrol includes K9, DUI patrols, reserves, etc.). Traffic and CSOs, both sworn and civilian, are not reflected in these figures, and will be addressed in separate reporting. This allows for assessment of how the department and its main patrol force is positioned to meet the demands of calls for service while also engaging in proactive policing to combat crime and disorder, and assist in addressing traffic issues in the community.

The department's main patrol force consists of patrol officers, sergeants, and bike patrol officers. As previously noted, patrol operates on 12-hour shifts starting at 4:00 a.m. and 4:00 p.m. A portion of the day shift starts later, at 6:00 a.m., while a portion of the evening shift starts at 5:00 p.m. These staggered hours assure field coverage during primary shift rotations. It should be noted that CPSM did not conduct an analysis of the shift configuration and reporting times as it was outside of the scope of this study.

The department's main patrol force deployed an average of 8.9 officers per hour during the 24-hour day in both winter and summer 2018. When additional units (K9, extra units, reserves, and traffic officers in DUI cars) were included, the department averaged 11.2 officers per hour during the 24-hour day in winter, and 11.1 officers in summer 2018.

We considered only those personnel who reported for duty rather than authorized staffing levels and describe the deployment and workload in distinct steps, distinguishing between winter and summer, and between weekdays (Monday through Friday), and weekends (Saturday and Sunday).

- First, we focus on patrol deployment alone.

- Next, we compare "all" workload, which includes community-initiated calls, police-initiated calls, directed patrol activities, and out-of-service activities.

- Finally, we compare the workload against deployment by percentage.

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

FIGURE 5-1: Deployed Officers, Weekdays, Winter 2018
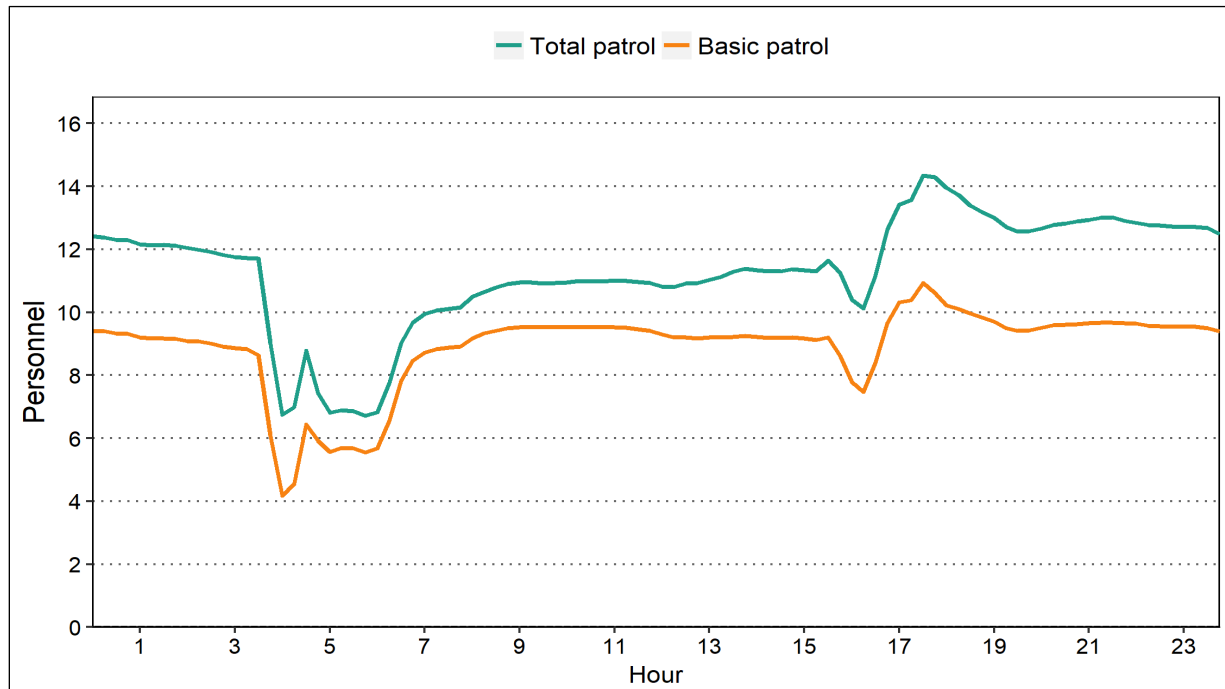
FIGURE 5-2: Deployed Officers, Weekends, Winter 2018
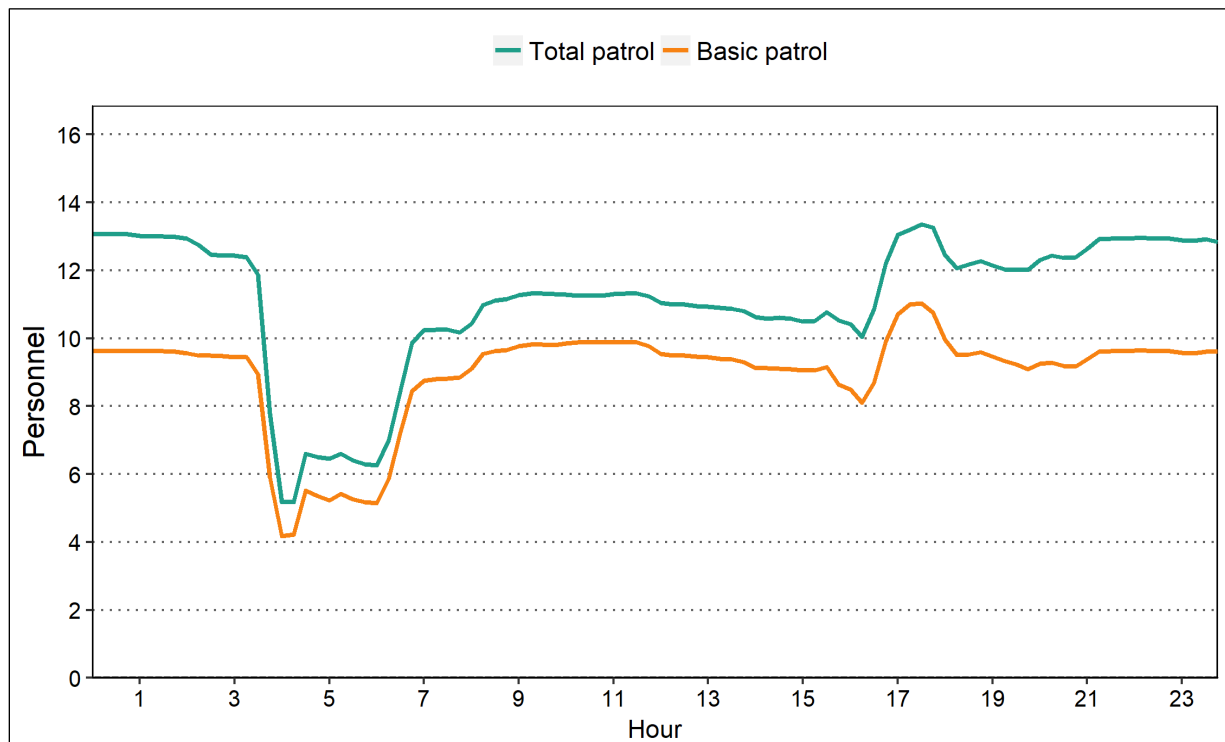
FIGURE 5-3: Deployed Officers, Weekdays, Summer 2018
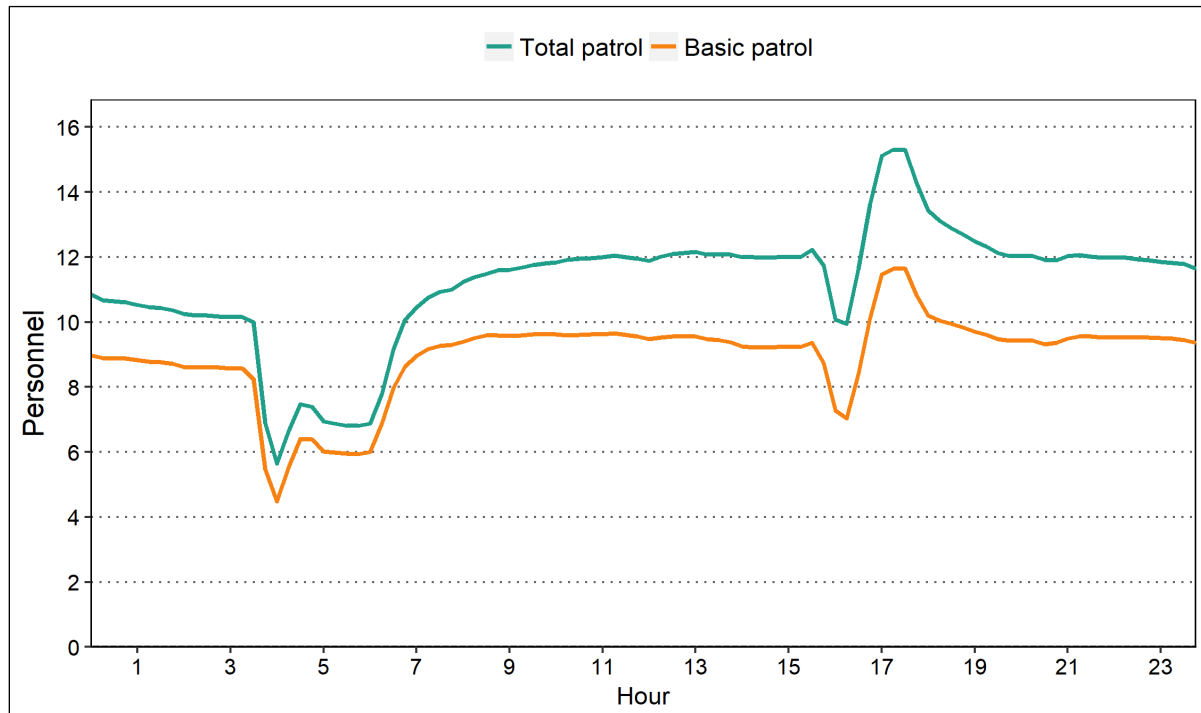
FIGURE 5-4: Deployed Officers, Weekends, Summer 2018
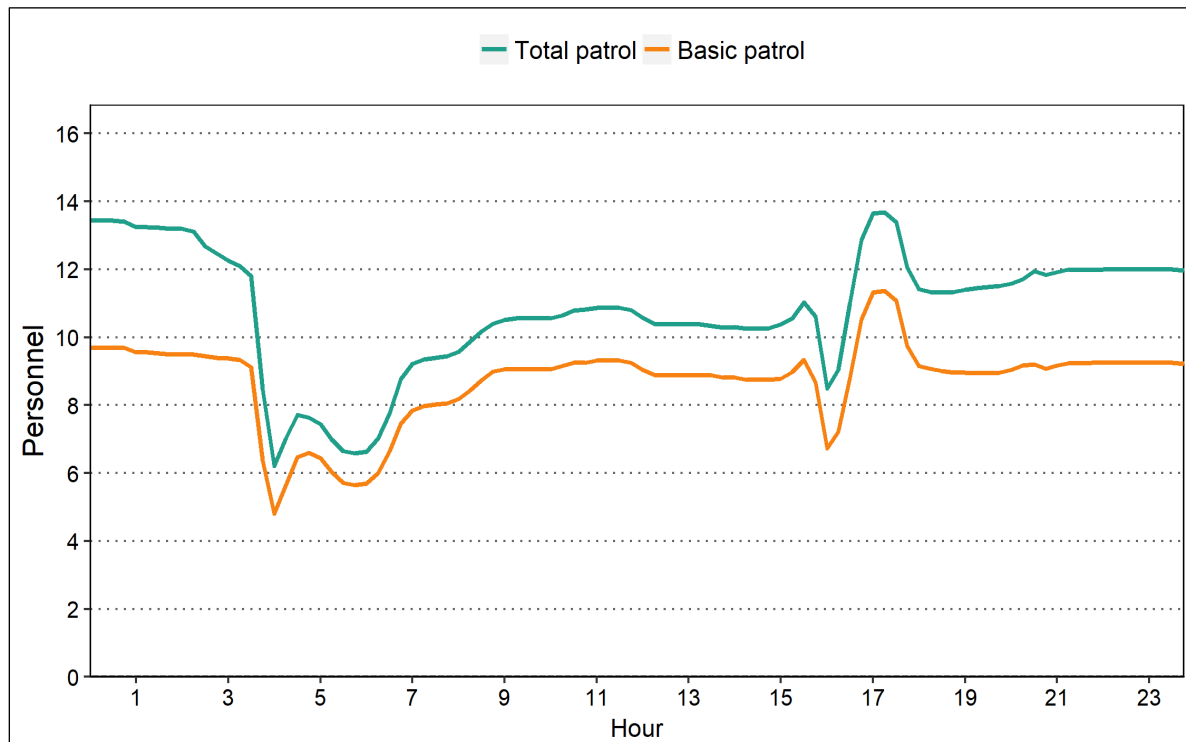
Observations:

- For winter (January 4 through February 28, 2018):

  - The average deployment was 11.3 officers per hour during the week and 11.1 officers per hour on the weekend.

  - Average deployment varied from 6.7 to 14.3 officers per hour on weekdays and 5.2 to 13.3 officers per hour on weekends.

- For summer (July 7 through August 31, 2018):

  - The average deployment was 11.2 officers per hour during the week and 10.8 officers per hour on the weekend.

  - Average deployment varied from 5.7 to 15.3 officers per hour on weekdays and 6.2 to 13.7 officers per hour on weekends.

In examining data from the 2014 CPSM study, and comparing average deployment between 2018 and 2013, it was noted that during the winter of 2018, weekday deployments were slightly lower than those of 2013 (11.3 vs. 11.9), and weekends as well (11.2 vs. 11.5). For summer, the weekday deployments were slightly higher in 2018 (11.2 vs. 10.7), and higher as well on weekends (11.1 vs. 10.5). Total deployment in both 2018 and 2013 were virtually unchanged.

In Figures 5-5 through 5-8 that follow, we examine the allocation of time to workload by category for deployed personnel. The numbers at the left side of the figures represent the number of personnel on duty. Moving right across the figure, staffing is reflected by hour of day over the 24-hour day. For instance, at noon, there are approximately 11 officers on patrol duty. This would include, approximately two traffic and/or K9 officers, reflected as Added Patrol (dark green). Of those 11 personnel deployed at noon, approximately 4.5 were committed to a community-generated activity, 2.5 were out of service, 0.5 were involved in directed patrol or on a self-initiated activity, and 3.5 were out of service. Again, these are averages over the eight-week period.

FIGURE 5-5: Deployment and All Workload, Weekdays, Winter 2018
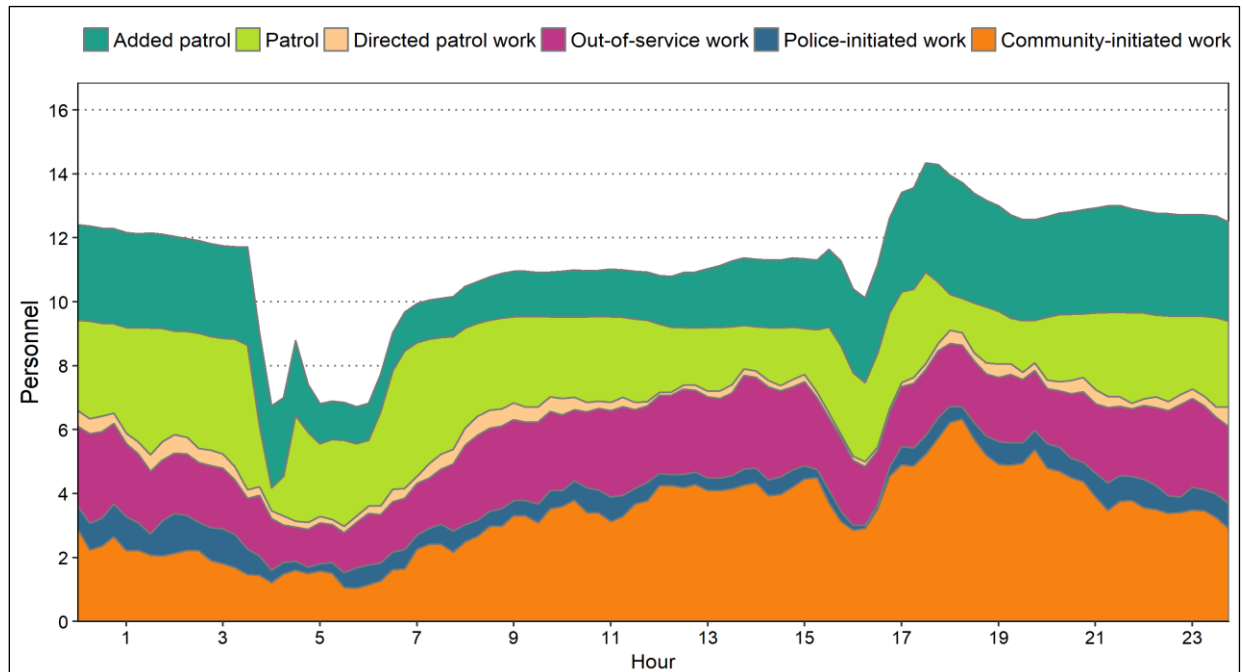
FIGURE 5-6: Deployment and All Workload, Weekends, Winter 2018
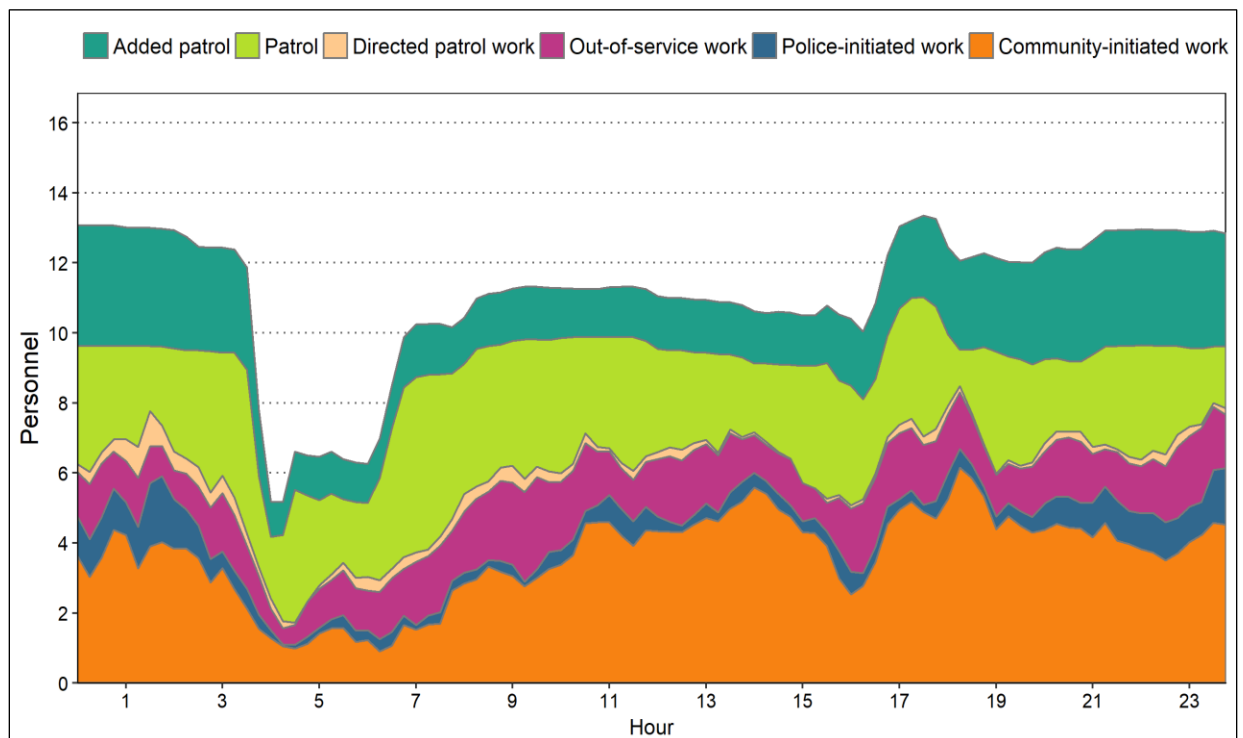
FIGURE 5-7: Deployment and All Workload, Weekdays, Summer 2018
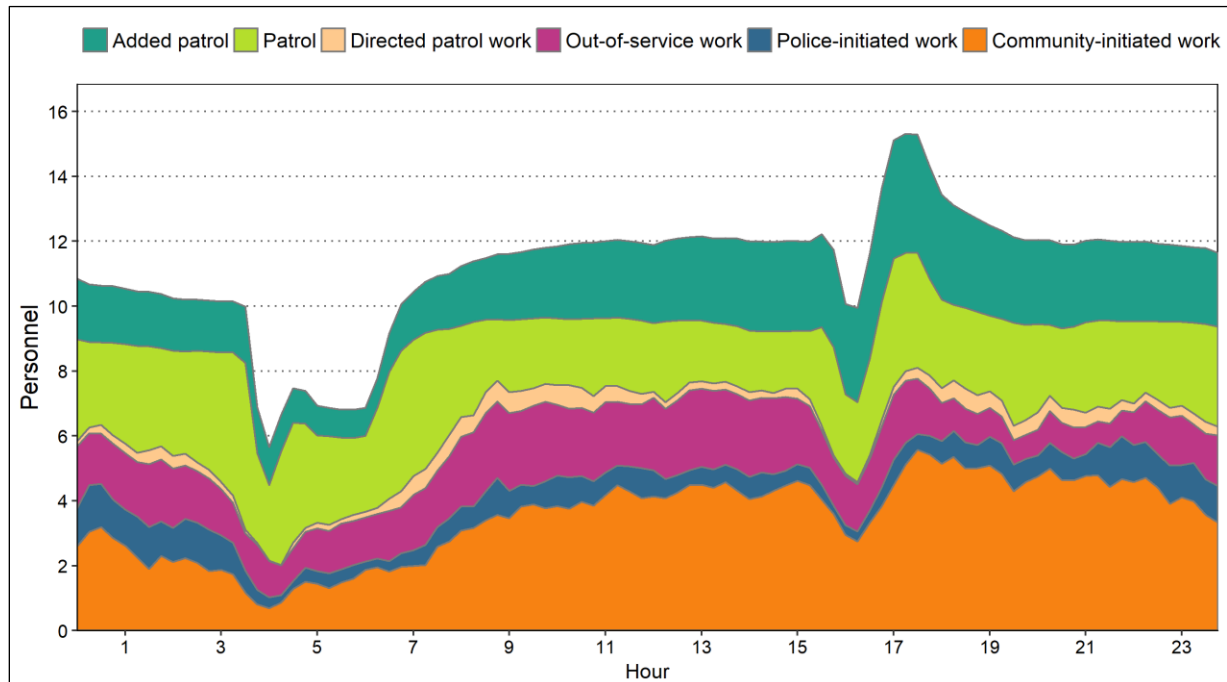
FIGURE 5-8: Deployment and All Workload, Weekends, Summer 2018
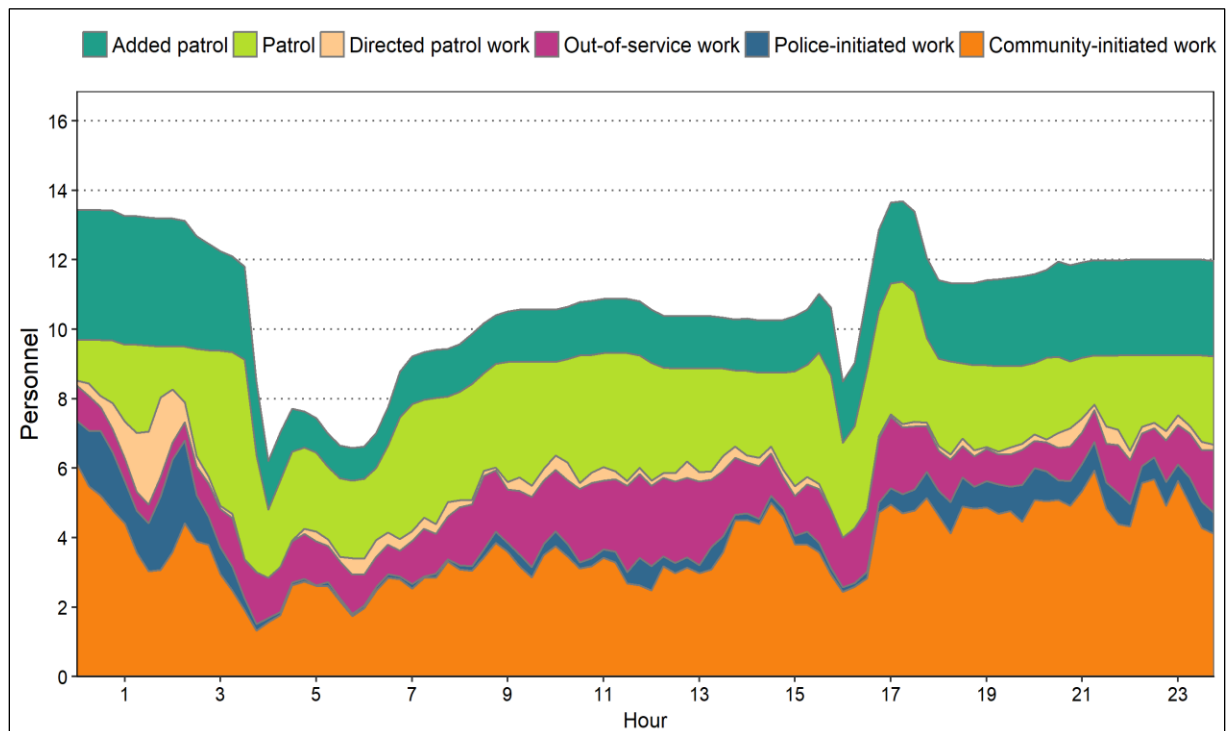
Note: Figures 5-5 to 5-8 show deployment along with all workload from community-initiated calls, police-initiated calls, directed patrol work, and out-of-service work.

Observations:

Winter:

- Community-initiated work:

  - Average other-initiated workload was 3.3 officers per hour during the week and 3.6 officers per hour on weekends.

  - This was approximately 29 percent of hourly deployment during the week and 32 percent of hourly deployment on weekends.

- All work:

  - Average workload was 6.4 officers per hour during the week and 5.9 officers per hour on weekends.

  - This was approximately 56 percent of hourly deployment during the week and 53 percent of hourly deployment on weekends.

Summer:

- Community-initiated work:

  - Average other-initiated workload was 3.5 officers per hour during the week and 3.7 officers per hour on weekends.

  - This was approximately 31 percent of hourly deployment during the week and 35 percent of hourly deployment on weekends.

- All work:

  - Average workload was 6.2 officers per hour during the week and 6.0 officers per hour on weekends.

  - This was approximately 56 percent of hourly deployment during the week and 55 percent of hourly deployment on weekends.

In Figures 5-9 through 5-12 that follow, the saturation index is explored. Patrol resources available are denoted by the dashed black line at the top. The 100 percent value indicates the total police officer hours available during the 24-hour period. The number of personnel may vary during the day consistent with the staffing of the shifts, but at any given hour the total amount of available manpower will equal 100. The red dashed line fixed at the 60 percent level represents the saturation index (SI). As discussed above in the Rule of 60, Part 2, this is the point at which patrol resources become largely reactive as CFS and workload demands consume a larger and larger portion of available time. The gold line represents the percentage of available resources committed to community-initiated activity, and the green line represents to percentage of available resources committed to all activity (community-initiated and self-initiated).

FIGURE 5-9: Percentage of Workload, Weekdays, Winter 2018
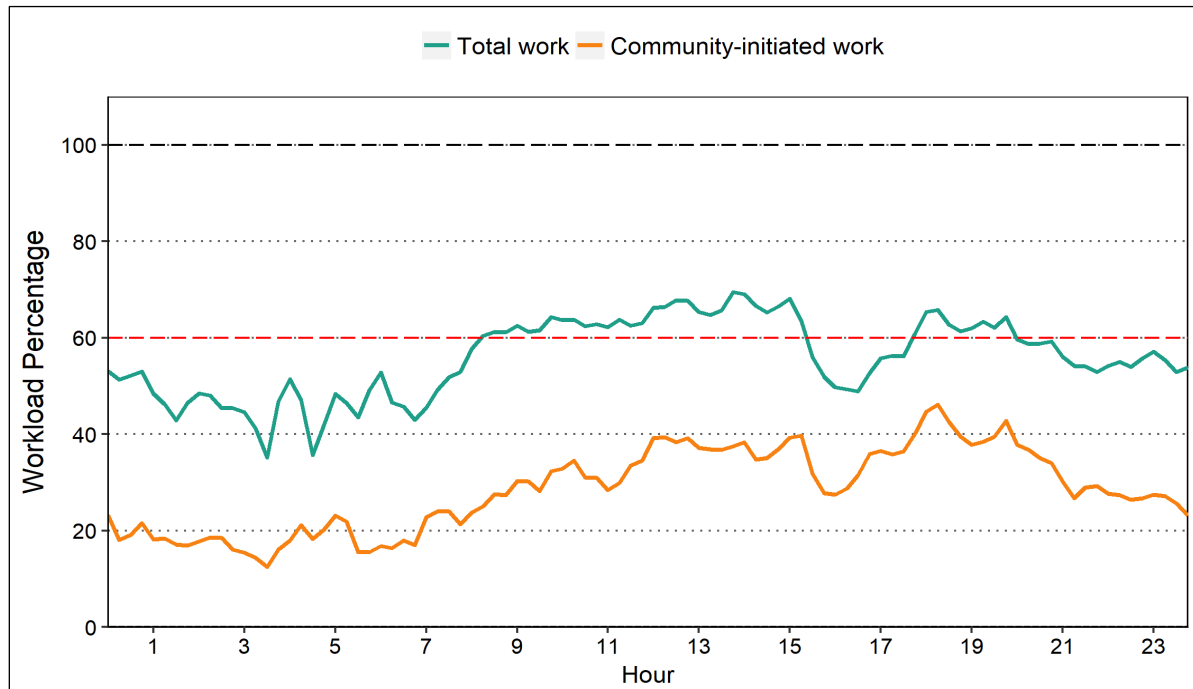
FIGURE 5-10: Percentage of Workload, Weekends, Winter 2018
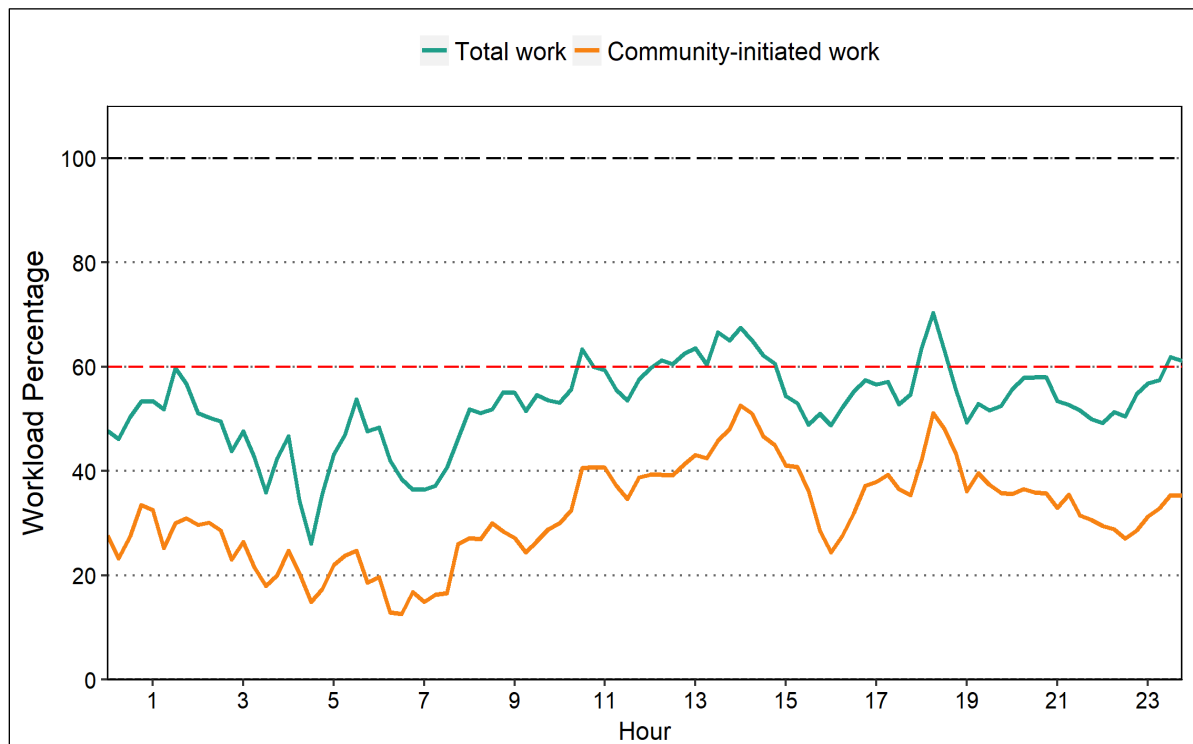
FIGURE 5-11: Percentage of Workload, Weekdays, Summer 2018
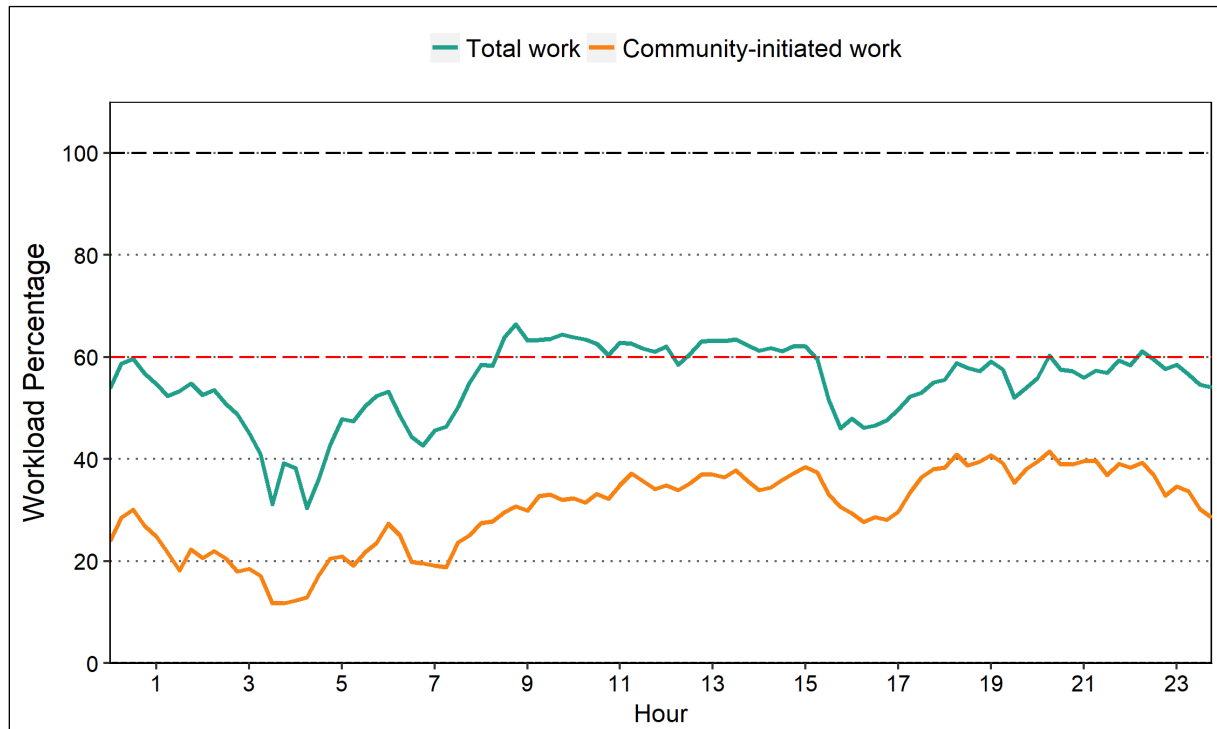
FIGURE 5-12: Percentage of Workload, Weekends, Summer 2018

Observations:

Winter:

- Community-initiated work:

  - During the week, workload reached a maximum of 46 percent of deployment between 6:15 p.m. and 6:30 p.m.

  - On weekends, workload reached a maximum of 53 percent of deployment between 2:00 p.m. and 2:15 p.m.

- All work:

  - During the week, workload reached a maximum of 74 percent of deployment between 2:15 p.m. and 2:30 p.m. and between 6:30 p.m. and 7:00 p.m.

  - On weekends, workload reached a maximum of 79 percent of deployment between 6:30 p.m. and 6:45 p.m.

Summer:

- Community-initiated work:

  - During the week, workload reached a maximum of 41 percent of deployment between 6:15 p.m. and 6:30 p.m., between 7:00 p.m. and 7:15 p.m., and between 8:15 p.m. and 8:30 p.m.

  - On weekends, workload reached a maximum of 50 percent of deployment between 9:15 p.m. and 9:30 p.m.

- All work:

  - During the week, workload reached a maximum of 66 percent of deployment between 8:45 a.m. and 9:00 a.m.

  - On weekends, workload reached a maximum of 65 percent of deployment between 2:30 p.m. and 2:45 p.m. and between 9:15 p.m. and 9:30 p.m.

Patrol Workload Demand Summary

We have extensively discussed workload to this point. It is evident that while present workload often exceeds standards established in the "Rule of 60" discussion, given the present vacancy rate, this is to be expected.

The data reveals that given present deployment numbers, the CPD main patrol force is under stress at numerous times throughout the day during both winter and summer, and both weekdays and weekends. Daily saturation indexes in the mid-50s and above the 60 percent range during much the time periods under observation suggest that CPD officers on patrol likely operate in an almost entirely reactive mode.

This may be a significant factor in the relatively low levels of productivity outside of handling assigned calls for service. As reflected in Figures 5-5 through 5-8, very minimal time is spent on self-initiated activities, more than half of which results from traffic stops (Table 5-3). And out-of-service time dwarfs time spent on self-initiated activity, regardless of time of day. More on this shortly.

In Table 5-8, we examine 2018 workload data vs. that of 2013. We must qualify that there are some variables between the data comparisons. In the 2018 study, the department asked that

we separate workload for patrol, community service officers, and traffic officers. For the 2014 study, the data was combined as a single patrol force. Nonetheless, the patrol officers make up the greatest percentage of the workforce (authorized 56 vs. six CSOs and six traffic officers). As such, though the numbers may vary, clearly workload has increased.

TABLE 5-8: Workload Percentage, 2018 vs. 2013

	Weekday 2018	Weekday 2013	Weekend 2018	Weekend 2013
Winter Workload				
Community Initiated	29	20	32	18
All Workload*	56	35	53	32
Summer Workload				
Community Initiated	31	21	35	25
All Workload*	56	34	55	36

*Includes community-initiated, officer-initiated, directed patrol, and out of service.

As we mentioned previously, a significant portion of officer-initiated activity falls within the category of *Out of Service*, which dwarfs officer-initiated activity. This is a departure from the 2013 data, which reflected that officer-initiated activity was consistently higher than out-of-service activity, and significantly so at most periods of the day. As such, we more closely examined 2018 workload data for patrol officers.

Based upon data provided by the department for 2018, patrol officers responded to 28,231calls for service from the public and conducted 11,614 self-initiated activities. The department further reported that personnel assigned to patrol (patrol officers and K9s) totaled 56 (does not include vacant positions).

For a perspective on individual workload, if one assumes every activity was handled equally and each patrol officer worked the equivalent of 161 12-hour shifts per year (assumes six weeks leave average), annually, each of the 56 patrol officers served as the primary handling unit on about 504 calls for service from the public (3.1 calls per shift), assisted as a back-up officer on 555 calls from the public (3.4 assists per shift), conducted 207 self-initiated activities (1.3 per shift), and assisted another officer on a self-initiated activity at a rate of 104 occurrences (0.65 assists per shift).

Relative to documented police reports, the department does not separate data by work group. However, it reported that for 2018, 8,705 police reports were submitted to the Records Section. At that number, and even if CSOs, traffic officers, nor specialized units prepared any reports, which is clearly not the case, each officer would have written 155 reports per year, or less than one per shift. Relative to arrests, the department reported that for 2018, 2,214 persons were taken into custody (does not include cite release). Using the same deployment and staffing formula, this would indicate that officers made one arrest every 4.1 shifts. We attempted to obtain traffic citation data, but were advised that the department was unable to obtain records on the total number of citations issued.

These numbers neither reflect vacancies, additional shifts that an officer worked to meet minimum staffing, nor any activities performed by personnel outside of basic patrol officers. Nonetheless, the numbers provide a point of reference as to activity level. It is understood that some officers are more active than others, and their individual data will vary from the averages, up or down.

Transportation and Booking of Prisoners

CPSM was asked to consider the impact of transportation and processing of prisoners. Due to state regulations governing the operation of jails, costs associated with staffing and operating the facility, and liability concerns, few except larger agencies or those with high rates of arrest opt to operate a jail. Rather, as is the case in Carlsbad, they transport prisoners to the nearest county jail or other contract jail facility. For Carlsbad, that is the San Diego County Jail facility in Vista, California.

Staff estimated that it generally takes one to two hours to complete the process and return to Carlsbad. This is, of course, dependent upon traffic congestion and any delays in processing a prisoner resulting from a backlog of bookings at the jail facility. In the experience of CPSM staff, these estimates are very reasonable. And, if there is a medical condition associated with the prisoner, the processing time may be significantly extended.

As noted before, the department reports that for 2018 it booked 2,214 prisoners into the county jail. On average, therefore, the department booked approximately six prisoners per day during that period. While those bookings are spread out throughout the 24-hour day, on average at least 12 hours per day are spent transporting and processing prisoners. If all prisoner transports involve two officers, that figure doubles. This commitment of time and resources is a concern expressed in virtually all agencies for which we conduct similar operational assessments.

While most municipal police departments utilize police officers to transport and process prisoners, CPSM would suggest that the department consider the utilization of civilians for this purpose. This would involve the creation of a new classification of personnel, Police Service Officer (PSO). PSOs would, in addition to the duties presently performed by patrol CSOs, take on the added responsibility of transporting and/or booking prisoners at the county jail. Appropriate training and equipment would be required. In the case of violent or high-risk prisoners, police officers would continue to be responsible for some or all of the transportation and processing, as appropriate.

For some police administrators this is a foreign concept, but in reality the use of civilians in transporting and processing prisoners is commonplace. Anecdotal reports from agencies where these responsibilities are assigned to civilians, whether their title be PSO, custody officer, jailor, or something else, suggest that adequately trained and equipped civilians can safely and more cost effectively carry out these duties. Utilization of civilians is generally well received by officers who no longer incur significant "down time" in performing these duties. There is a clear cost benefit to the city. As such, we recommend the city and department consider the creation of a PSO classification, the addition of two new FTEs in this position, and the upgrade of two existing CSO positions to PSO. This would allow for a total PSO staffing of four positions. While this would reduce patrol CSO staffing from six to four, PSOs would perform CSO duties until called upon to transport and process prisoners. In so doing, they remain a significant resource to patrol operations and overall, represent a net gain.

At the time of the site visit, this option was discussed with Chief Gallucci, and a referral made to a Southern California municipal police agency that has such a program.

Patrol Division Summary

At the time of the CPSM visit, patrol was being significantly impacted by staffing shortages due to the number of trainees (considered by the department as an unfilled position for staffing purposes) and vacancies. Our calculation reflected that the rate of vacancy was approximately 18 percent of authorized staffing. That is actually down from a 27 percent

vacancy rate at the beginning of the year. Fatigue, morale, and low productivity all develop when mandated overtime is required to routinely staff shifts just to meet minimum staffing. As we reported on in the minimum staffing discussion, overtime is required at a rate of approximately every fourth shift.

As was reviewed in the section on Workload Demand Analysis, and specifically in Figures 5-9 to 5-12, during a great share of the day, patrol workload measures in the 50 percent to high 60+ percent range. It is in this range that officers shut down self-initiated activities. Summer and winter weekends and weekdays all reflect these levels of patrol saturation, which results in little proactivity.

It is clear that community-initiated workload demands have increased since CPSM last assessed this issue in 2014 (Table 5-8). That is a significant contributing factor to overall workload demand. More surprisingly, the amount of out-of-service time has soared. This is worthy of further examination by the department. Regardless, based upon present operational protocols, workload demands have all but curtailed self-initiated activity.

With present staffing levels, the workload demands are excessive, often in the range of saturation (Rule of 60), and at times above. Given the vacancy rate, patrol frequently operates at minimum staffing. In examining Figures 5-1 through 5-4, it would even appear that patrol often operates below minimum staffing during weekend evening deployments. Based upon data in Table 5-2, it would appear that this is the period (Evening Watch) where the majority of patrol vacancies exist. While it would seem simple to reassign personnel from day watch to evening watch, this would likely result in day watch deployments falling below minimum staffing.

In any event, in order to reduce workload demands, CPSM recommends increasing minimum staffing by the addition of one officer between the hours of 8:00 a.m. and 1:00 a.m. during winter weekdays, and 10:00 a.m. to 1:00 a.m. during winter weekends. For summer weekdays, minimum staffing should be increased by one officer between 8:00 a.m. and 4:00 a.m. during the week, and all 24 hours on weekends. At present, due to vacancies, to get to these staffing levels requires overtime personnel. The addition of these personnel equates to the approximate equivalent of four FTEs. If the recommended increase were to occur, it would reduce the saturation index rate from its present percentage level in the mid-50s (averaged over 24 hours) to approximately 50 percent.

If the department can fill its vacancies, the need for overtime expenditures to reach minimum staffing, even at these increased levels, would be infrequent.

A more significant issue is the lack of adequate supervision assigned to each shift. As we previously noted, present levels consist of one lieutenant and two sergeants. Again, the lieutenants' role is largely administrative, with very limited time spent in the field. Sergeants on the other hand should spend the majority of their time directing field operations. Nonetheless, they also have administrative and collateral duties, including review and approval of police reports, supervision of collateral duty assignments which may include SWAT, K9, bicycle patrols, attendance at neighborhood functions, handling of personnel complaints, serving as the watch commander in the absence of a lieutenant, and a host of others, nearly all of which take them out of the field.

As discussed, all personnel are on various forms of leave (vacation, sick, training, etc.) at a rate of approximately 25 percent. With a lieutenant and only two sergeants assigned to a shift, it is not uncommon for only two supervisors to report to work, be that a lieutenant and a sergeant, or two sergeants. At that staffing level, the sergeant is left to try to manage both field operations

and ensure that the variety of administrative duties are handled. This level of supervision is inadequate to perform the vital role for which they are charged.

There is no question that at present, line staffing levels in patrol are inadequate to meet workload demands. We have made recommendations to, in part, address this. These include the creation of a PSO classification, expanding the current role of CSOs, expanding the role of the K9 units, and increasing minimum staffing. A significant cause of the heavy workload demand is the present vacancy rate, as calculated by the department. Once vacancies are filled and new hires are trained, and if the CPSM recommendations are adopted, adequate line staff will be available to manage the workload. CPSM data analysts calculated that if the described staffing levels were attained, the workload would fall below the 50 percent saturation index to a level closer to 45 percent. To meet the service level expectation of the residents of Carlsbad, this saturation index rate is appropriate.

For these reasons, while we are not recommending the addition of patrol officers, we strongly encourage the city to increase staffing levels for supervision through the addition of four sergeants, one to each of the primary patrol shifts.

While discussion of the shift configurations are outside of the scope of work for this study, we noted in the 2014 study that the department should look to an alternate schedule that better aligns staffing to workload demand. That may be as simple as a shift in the reporting times under the existing 3/12 plan. Doing so would aid in addressing workload demands during peak periods without the addition of new personnel.

Patrol Recommendations:

■ Increase sergeant staffing by four FTEs, one each per primary patrol shift. (Recommendation No. 1.)

■ Increase minimum staffing levels of patrol shifts by one police officer for the hours specified in this report. (Recommendation No. 2.)

■ Consider establishing a Police Service Officer classification, staffing for which would include two new FTEs and the upgrade of two Community Service Officers (CSOs). PSOs would be assigned to the patrol function, with duties that include those of existing patrol CSOs plus added responsibilities of transport/booking of prisoners. (Recommendation No. 3.)

■ Over a three-month period, assess the number of calls for service handled by patrol officers that are deemed appropriate for assignment to a CSO. If sufficient numbers exist to warrant additional CSO staffing, submit budget requests to hire appropriate numbers of CSO staff. (Recommendation No. 4.)

■ Consider expanding the utilization of K9 units in handling of calls for service. (Recommendation No. 5.)

■ Examine causative factors contributing to the extraordinary rate of out-of-service time. (Recommendation No. 6.)

■ Examine shift deployment schedules and adjust as necessary to better align available personnel to workload demands. (Recommendation No. 7.)

COMMUNITY SERVICE OFFICERS

Community Service Officers (CSOs) are civilian employees who perform limited duties, generally not involving instances where suspects are present or known. Their duties typically include report writing, parking enforcement, traffic control, handling abandoned autos, and evidence collection, among others. The value of CSOs cannot be overstated. They relieve officers from handling a myriad of duties that would otherwise encumber officers' availability to respond on more serious incidents and/or engage in community policing strategies. Additionally, operational costs associated with CSOs, including hiring, training, equipment, and salaries and benefits, are significantly lower than for sworn police officers.

As police agencies evaluate the propriety of utilizing CSOs as part of their workforce, and to what extent, they must consider whether sufficient workload demands exist to warrant their utilization. Where sufficient workload demands exist, they are a cost-effective alternative to sworn police officers, without a compromise in service. As we examine workload in Carlsbad, we will evaluate this.

Staffing / Deployment

The Patrol Division is budgeted for six CSOs. At the time of the site visit, one vacancy existed. Coverage is scheduled seven days per week from 6:00 a.m. to 12:00 midnight, as staffing allows. Given the present level of staffing, this generally results in one CSO available during these hours. When CSO vacancies occur, it has a significant impact on patrol operations, as sworn police officers are then called upon to perform CSO duties. Notwithstanding the discussion regarding PSOs, a concerted effort should be made to minimize vacancies in the CSO staffing levels. Such efforts should not be secondary to those of recruiting for police officers.

In recommending the creation of a PSO position, by no means do we intend to diminish the role of the CSO. Rather, the PSO positions would supplement the work of CSOs until such time as PSOs are diverted to handle prisoner transportation. Given the rate of arrests, the majority of the PSO assignment would be spent supplementing CSO work efforts.

Workload Analysis

As we discuss workload, we draw upon the data report for analysis. Significant portions of the information from the data report are imported into this assessment. Additional detail is available in the data report and we encourage readers to review it. It is important to note here, that unlike sworn patrol deployments, the Rule of 60 does not apply to CSO deployment. Indeed, it is the objective that CSOs' availability will be fully encumbered by workload in order to allow for sworn officers time to be freed up for community policing activities and availability for emergency responses.

From January 1, 2018 to December 31, 2018, the dispatch center recorded 4,933 events which involved community service officers (CSOs). During this period, the dispatch center also recorded activities assigned to CSOs that were not assigned a call number. After excluding activities that lasted less than 30 seconds or more than 8 hours, 814 non-call activities were included in the analysis.

Tables 5-9, 5-10, and 5-11 and Figure 5-13 that follow contain workload data for the entire year. This includes an overview of the number of events, calls, out-of-service activities, deployment, and workload for CSOs.

Table 5-9 explores workload by category and total workhours associated with each.

TABLE 5-9: CSO Events and Calls, by Category

Category	Events	Calls	Work Hours
Accident	53	53	46.3
Alarm	2	2	1.0
Animal	18	15	4.4
Assist other agency	21	20	15.2
Check	221	220	109.7
Crime–person	48	47	55.9
Crime–property	1,361	1,342	1,420.6
Directed patrol	700		
Disturbance	15	15	19.6
Investigation	182	180	164.5
Miscellaneous	181	178	115.6
Out of service–administrative	221		
Public contact	95	94	49.1
Suspicious incident	53	52	34.8
Traffic enforcement	1,762	1,728	621.4
Total	**4,933**	**3,946**	**2,658.2**

Note: Events include all recorded calls which involved a CSO unit. We removed events with zero time on scene, directed patrol, and out-of-service activities when calculating the number of calls and the work hours associated with each call category.

Table 5-10 reflects out-of-service activities.

TABLE 5-10: CSO Out-of-service Activities and Occupied Times by Description

Description	Occupied Time	Count
At Station	39.1	98
Car Wash	19.1	39
Court	180.0	3
Meeting	46.4	37
Office Routine	34.0	116
Officer Training	92.7	24
Out of Car	13.9	188
Out of Service	49.9	6
Reports	44.9	305
VIA 1021	19.1	1
Administrative - Weighted Average/Total Activities	**36.3**	**817**
Meal Break	41.1	218
Weighted Average/Total Activities	**37.3**	**1,035**

Observations:

- There were 72 zero on scene calls that involved CSOs.

- 14 percent of the events were directed patrol events and 4 percent were out of service-administrative events.

- The top three categories–traffic (enforcement and accidents), crime (person and property), and checks–accounted for 86 percent of calls.

- Traffic enforcement accounted for 44 percent of calls and 23 percent of workload.

- Property crime calls accounted for 34 percent of calls and 53 percent of workload.

- Out-of-service activities had an average duration of 37.3 minutes.

- The most common administrative activity was "reports."

FIGURE 5-13: CSO Calls per Day, by Month
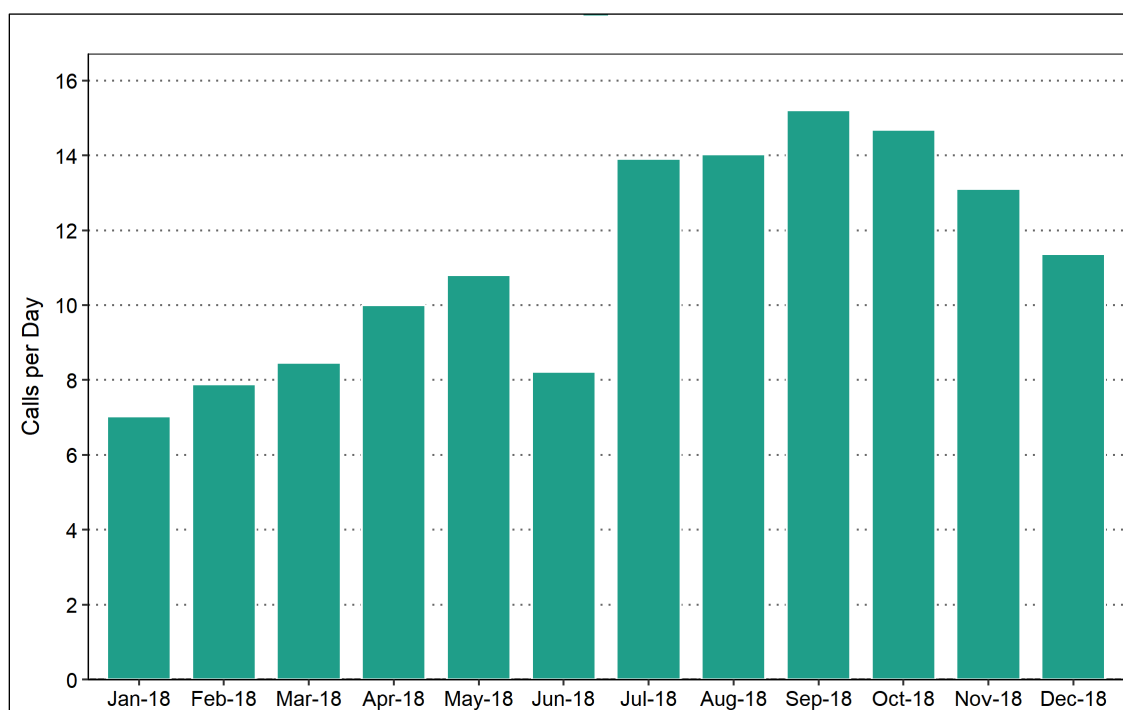
Note: The number of calls per day was calculated based on the number of days in the month that community service officers handled at least one call.

TABLE 5-11: CSO Calls per Day, by Month

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Calls per Day	7.0	7.9	8.5	10.0	10.8	8.2	13.9	14.0	15.2	14.7	13.1	11.4

Observations:

- The number of calls per day was lowest in the month of January and highest in the month of September.

In Figures 5-14 and 5-15 we examine deployment and workload in the same manner as was done for uniformed patrol. The first period is from January 4 through February 28, 2018, or winter, and the second period is from July 7 through August 31, 2018, or summer. In this case, the figures do not cover a 24 hour day, but rather, the work hours when CSOs are generally deployed. You will note in Figure 5-15 that CSO occupied times are generally higher than those of sworn officers; again, this is an objective of their utilization. You will also note that at times, there appears to be rapid changes in workload. This results from the fact that there is generally only one CSO on duty at a time. The page following the figures highlights observations with percentages.

FIGURE 5-14: Deployment and All Workload, Weekdays, CSO Units
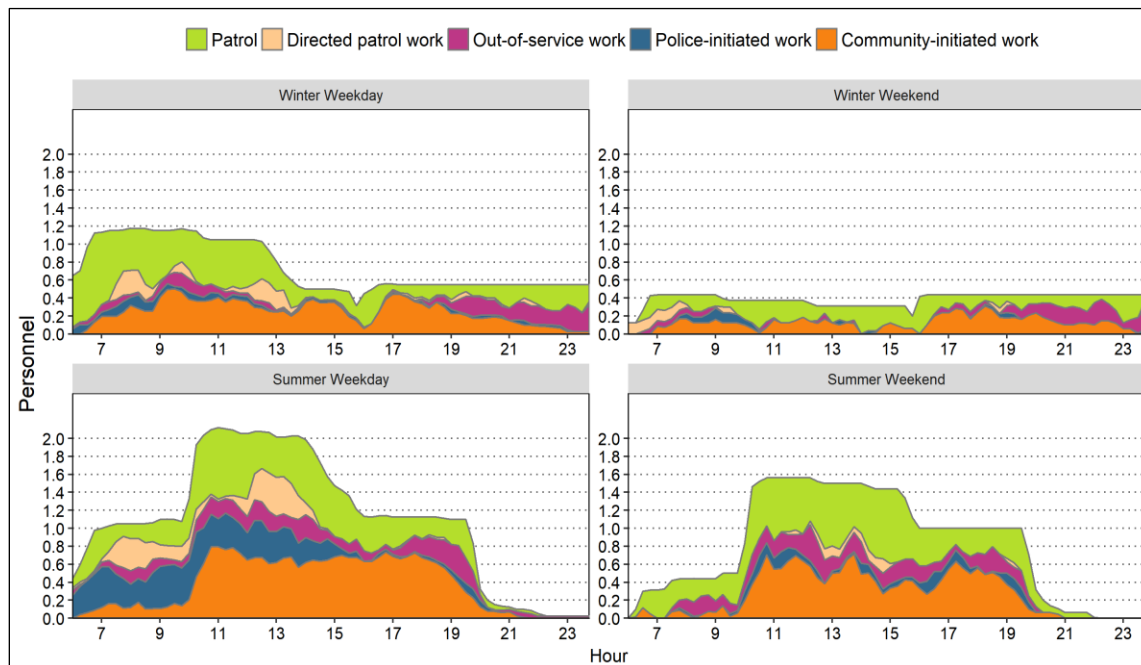
FIGURE 5-15: Workload Percentage by Hour, CSO Units

Observations:

Winter:

- Deployment:

  □ The average deployment was 0.6 officers per hour during the 24-hour day in winter.

  □ The average deployment was 0.7 officers per hour during the week and 0.4 officers per hour on the weekend.

  □ Average deployment varied from 0.3 to 1.2 officers per hour on weekdays and 0.1 to 0.4 officers per hour on weekends.

- Other-initiated work:

  □ Average other-initiated workload was 0.2 officers per hour during the week and 0.1 officers per hour on weekends.

  □ This was approximately 33 percent of hourly deployment during the week and 32 percent of hourly deployment on weekends.

  □ During the week, workload reached a maximum of 80 percent of deployment between 5:00 p.m. and 5:30 p.m.

  □ During the weekend, workload reached a maximum of 71 percent of deployment between 6:15 p.m. and 6:30 p.m.

- All work:

  □ Average total workload was 0.4 officers per hour during the week and 0.2 officers per hour on weekends.

  □ This was approximately 56 percent of hourly deployment during the week and 57 percent of hourly deployment on weekends.

  □ During the week, workload reached a maximum of 89 percent of deployment between 5:00 p.m. and 5:15 p.m.

  □ On weekends, workload reached a maximum of 89 percent of deployment between 11:15 p.m. and 11:30 p.m.

It is evident that the utilization of CSOs is of value to policing operations for the City of Carlsbad. This is reflected in the activity rates reflected in Figures 5-14 and 5-15. CPSM suggests that this role could and should be expanded. For instance, while CSOs served as the primary handling unit on 53 traffic collisions in 2018 (Table 5-8), patrol officers served as the primary handling unit on 1,296 (Table 5-5), the vast majority of which required two, three, or more units (Table 5-6). Clearly, the CSOs could and should take on a greater role in this arena, and likely others, and thus, free up patrol officer resources.

CSO Recommendations:

- Expand the role of CSOs in response to traffic collisions and other appropriate duties. (Recommendation No. 8.)

- Expand the Community Service Officer complement to eight authorized positions with the end goal of incorporating Police Service Officers into the staffing complement. Ultimately, the complement would include four CSOs and four PSOs. (Recommendation No. 9.)

TRAFFIC DIVISION

Traffic safety and the efficient flow of traffic are always important factors for any community. In communities of similar demographics to that of Carlsbad, traffic-related matters are generally the primary complaint/concern expressed to the police department. While concerns often emanate from residential areas and school zones, traffic accidents often occur more frequently in areas with a high retail concentration and/or high traffic volume. Anecdotal evidence suggests that this is also the case in Carlsbad; therefore, it is imperative that CPD commit adequate resources to address all traffic-related issues.

Staffing / Deployment

The CPD has a dedicated Traffic Division. Table 5-12 reflects authorized and actual staffing.

TABLE 5-12: Traffic Bureau Authorized Staffing Levels, FY 2017/2018

Position	FY 2018/2019
SWORN PERSONNEL	
Lieutenant	1
Sergeant	1*
Accident Investigator	2*
Motor Officer	6
Sworn Total	**10**
CIVILIAN PERSONNEL	
Community Services Officer	1
Civilian Total	**1**
Total Authorized Personnel	**11***

*Note: The sergeant is currently on long-term injury leave. The position is temporarily filled by an accident investigator, leaving one accident investigator at present.

Traffic officers work an overlapping 4-10 schedule from 6:00 a.m. to 4:00 p.m., either Monday through Thursday, or Tuesday through Friday. Traffic personnel also work overtime assignments at special events and enforcement programs, including some weekends.

Workload Analysis

Duties of the division are divided as follows:

- Accident investigators are responsible for the investigation of fatal or major injury collisions as well as follow-up investigation of all hit and run incidents.

- Motor officers conduct traffic enforcement, respond to traffic complaints, conduct safety/education campaigns at schools, and as necessary, assist patrol with general calls for service.

- The CSO responds to parking complaints, impounds vehicles as necessary, assists with enforcement needs associated with street sweeping and the Farmers Market, and assists with the division's administrative activities.

As we discuss workload, we again draw upon the data report for analysis. Significant portions of the information from the data report are imported into this assessment. Additional detail is

available in the data report and we encourage readers to review it. It is important to note here, that like sworn patrol deployments, the Rule of 60 applies. Traffic officers must have a sufficient amount of uncommitted time to conduct enforcement efforts. Monitoring high-frequency traffic collision locations, school zones, areas where speeding violations are common, and responding to community complaints all require substantial uncommitted time.

Between January 1, 2018 and December 31, 2018, the dispatch center recorded 5,117 events which involved accident investigators and motor units. During this period, the dispatch center also recorded activities assigned to traffic units that were not assigned a call number. After excluding activities that lasted less than 30 seconds or more than 8 hours, 1,028 noncall activities were included in the analysis.

This section gives an overview of the number of calls, out-of-service activities, deployment, and workload for traffic units. Tables 5-13, 5-14, 5-15 and Figure 5-16 contain data for the entire year.

TABLE 5-13: Traffic Events, Calls, and Workload by Category

Category	Events	Calls	Work Hours
911 hang up	4	4	0.4
Accident	198	197	316.6
Alarm	14	14	3.3
Animal	7	6	3.8
Assist other agency	35	33	24.6
Check	291	291	409.4
Crime–person	21	19	13.7
Crime–property	22	21	16.1
Directed patrol	211		
Disturbance	24	23	25.3
Investigation	50	50	55.8
Miscellaneous	40	40	84.4
Out of service–administrative	271		
Public contact	73	72	25.0
Suspicious incident	46	45	19.7
Traffic enforcement	3,810	3,792	792.4
Total	**5,117**	**4,607**	**1,790.6**

Note: Events include all recorded calls which involved a traffic unit. We removed events with zero time on scene, directed patrol, and out-of-service activities when calculating the number of calls and the work hours associated with each call category.

It is interesting to note here, as with CSOs, in 2018, traffic officers handled relatively few accident calls for service (197) vs. patrol (1,296). While as a percentage of total staffing, traffic officers handled somewhat more accident calls than patrol officers, given the mission of the assignment and substantial additional uncommitted time vs. patrol, it may present an opportunity for traffic officers to take a greater role in the investigations of accidents, thereby reducing workload demands on patrol.

It should be noted that we attempted to obtain Traffic Section citation data for the past two years to assist in our workload evaluation. Unfortunately, a longstanding IT problem linking

records systems prevents access to that data. Accident data specific to Traffic personnel is not kept, so we rely on our CAD data analysis (Table 5-13).

Table 5-14 reflects out-of-service activities. Occupied time represents the average per call.

TABLE 5-14: Traffic Out-of-service Activities and Occupied Times by Description

Description	Occupied Time	Count
At station	84.2	59
Car wash	21.0	19
City yard	84.7	55
Court	124.1	36
Enroute out of service	26.9	44
Meeting	123.1	87
Office routine	77.1	168
Officer training	143.2	219
Out of car	51.3	35
Out of service	27.5	340
Range	99.5	10
Reports	113.7	154
Administrative - Weighted Average/Total Activities	**81.8**	**1,226**
Meal break	47.9	77
Weighted Average/Total Activities	**79.8**	**1,303**

Observations:

- There were 38 zero-on-scene calls that involved traffic units.

- 4.1 percent of the events were directed patrol events and 5.3 percent were out of service– administrative events.

- 87 percent of the calls and 63 percent of the workload were traffic calls. Traffic enforcement and accidents are included in traffic calls.

- Out-of-service activities had an average duration of 79.8 minutes.

- The most common administrative activity was labelled "out of service."

- The activity with the longest average duration was "officer training."

As with patrol, traffic officers record substantial out-of-service time including one hour per day for motorcycle maintenance involving checking of engine oil, tire pressure, and light cleaning. The department should examine categories within Table 5-14 to determine if this level of out-of-service activities is appropriate and necessary.

FIGURE 5-16: Traffic Calls per Day, by Month
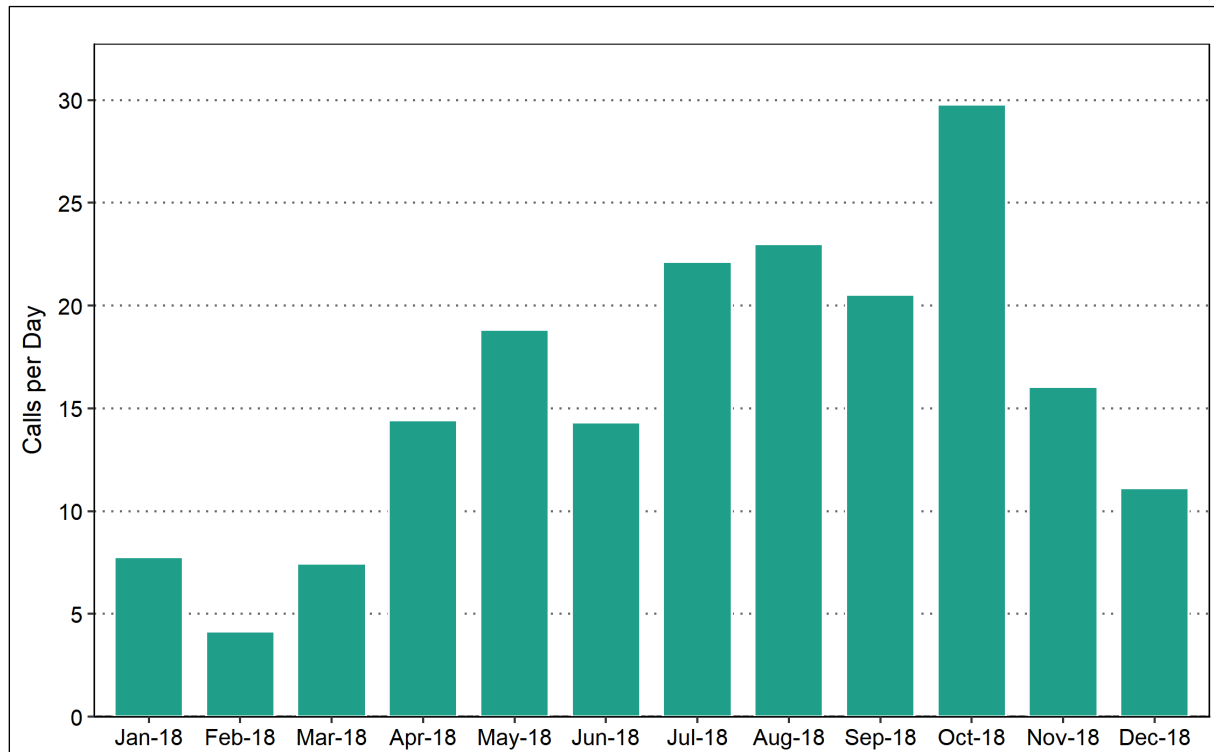
Note: The number of calls per day was calculated based on the number of days in the month that traffic officers handled at least one call.

TABLE 5-15: Traffic Calls per Day, by Month

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Calls per Day	7.8	4.2	7.4	14.4	18.8	14.3	22.1	23.0	20.5	29.8	16.0	11.1

Observations:

- The number of calls per day varied significantly throughout the year.

- February had the least number of calls and October had the largest number of calls.

In Figures 5-17 and 5-18, we examine deployment and workload in the same manner as was done for uniformed patrol as well as CSOs. Once again, we utilize two eight-week sample periods of January 4 through February 28, 2018, or winter, and July 7 through August 31, 2018, or summer. In this case, as with CSOs, the figures do not cover a 24-hour day, but rather, the work hours when Traffic Division officers are generally deployed.

FIGURE 5-17: Deployment and All Workload, Weekdays, Traffic Units
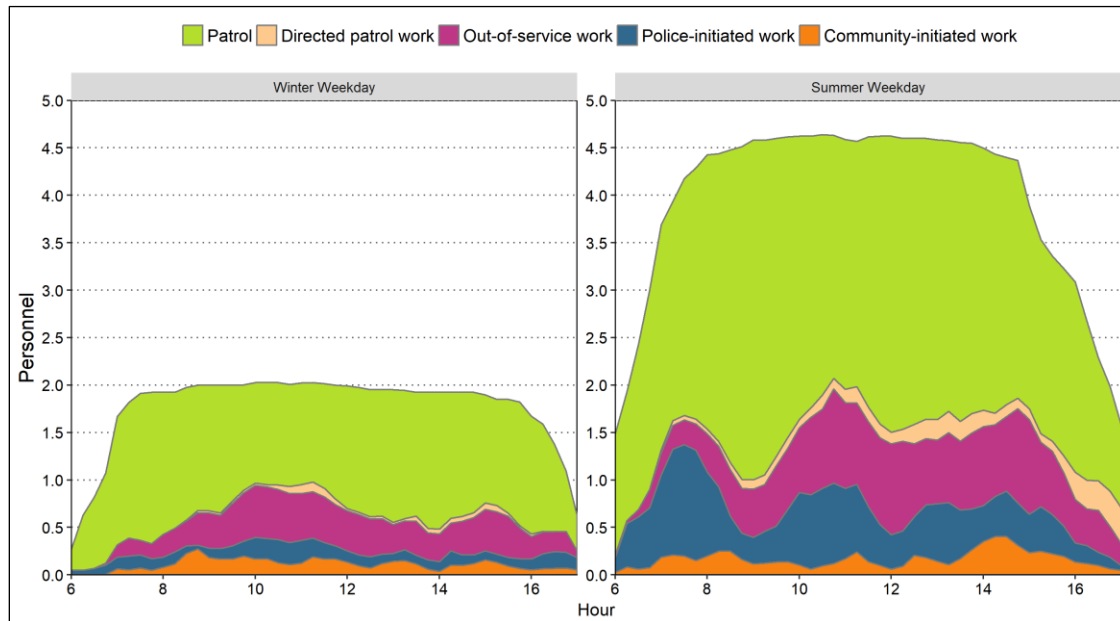
FIGURE 5-18: Workload Percentage by Hour, Traffic Units

Observations:

Winter:

- Deployment:
  - □ The average deployment was 1.8 traffic officers per hour in winter.
  - □ Average deployment varied from 0.3 to 2.0 traffic officers per hour.
- Other-initiated work:
  - □ Average other-initiated workload was 0.1 officers per hour, which was approximately 6 percent of hourly deployment.
  - □ Average workload reached a maximum of 14 percent of deployment between 8:45 a.m. and 9:00 a.m.
- All work:
  - □ Average total workload was 0.6 officers per hour.
  - □ This was approximately 33 percent of hourly deployment.
  - □ During the week, workload reached a maximum of 48 percent of deployment between 11:15 a.m. and 11:30 a.m.

Summer:

- Deployment:
  - □ The average deployment was 4.0 traffic officers per hour in summer.
  - □ Average deployment varied from 1.5 to 4.6 traffic officers per hour.
- Other-initiated work:
  - □ Average other-initiated workload was 0.1 officers per hour, which was approximately 4 percent of hourly deployment.
  - □ Average workload reached a maximum of 9 percent of deployment between 2:30 p.m. and 2:45 p.m.
- All work:
  - □ Average total workload was 1.4 officers per hour, which was approximately 36 percent of hourly deployment.
  - □ During the week, workload reached a maximum of 45 percent of deployment between 10:45 a.m. and 11:00 a.m., between 3:00 p.m. and 3:15 p.m., and at 5:00 p.m.

As reflected in Figure 5-18, community-initiated demand is low at an average of six percent of Traffic Division workload for the winter period, and nine percent for summer. When including officer-initiated activities, winter workload averaged 33 percent, with the summer period averaging 36 percent. As such, when factoring in total workload, including out-of-service activities, officers' time was uncommitted for 67 percent of the day during the winter evaluation period and 64 percent of the day during the summer period. As we noted previously, this is not idle time, but rather, time available to monitor high-frequency collision locations, or those areas of other safety concerns. Given this data, it would appear that Traffic officers have sufficient time to perform their assigned duties.

While we were unable to obtain comprehensive citation data, we did review a monthly report dated March 14, 2019. The report indicated that motor officers were available for deployment

for 870 hours for the month, or 87 ten hour shifts. Of that time period, only 219.5 hours were available for patrol due to multiple factors including vacation, comp time off, sick leave, motorcycle maintenance, and special projects or otherwise out-of-service time. As such, of available deployment time, only 25 percent was spent on traffic enforcement. During that time, 108 citations were issued and 106 warnings given. With six motorcycle officers assigned to the unit, that would suggest that each officer averaged 35.7 citations or warnings per month, or approximately 2.2 per work day (16 shifts). We leave this to the department to evaluate time management and productivity levels.

As noted, the personnel in the division generally works hours covering Monday through Friday, from 6:00 a.m. to 4:00 p.m. There is no deployment during the busy evening commute, nor on weekends, except by special assignment. While we believe that out-of-service time and productivity levels should be examined, we also believe that coverage during the hours of 4:00 p.m. to 7:00 p.m. weekdays, and coverage on weekends, is also important. By adding three additional staff, a work schedule can be easily established to accomplish this objective.

Traffic Recommendations:

- Increase FTE staffing by three motor officers to allow for staffing during evening commute times as well as limited weekend deployments. (Recommendation No. 10.)

- Reconsider the practice of granting motorcycle officers a one-hour maintenance period per day to conduct activities largely limited to checking engine oil, tire air pressure, and light cleaning, duties that should take only minutes. (Recommendation No. 11.)

- Examine causative factors contributing to high levels of out-of-service time. (Recommendation No. 12.)

RESPONSE TIME TO COMMUNITY-INITIATED CALLS FOR SERVICE 2018 /2013

As noted, CPSM conducted a study of the CPD in 2014. At that time, we examined response times. Here, we compare response times from the 2019 study vs. those of the 2014 study. The data is captured for the one-year period in advance of our site visit(s). Thus, for the current study, the data is from 2018; the data from the 2014 study was captured from 2013 workload. For this comparison, we utilize the same study methodology examining calls by priority, the time from call receipt to dispatch to a patrol unit, the travel time to arrive on scene, and ultimately the combination of those times to calculate the overall response time. Further, we examine the total number of calls by priority. For this examination, we consider only community- initiated calls for service. We will further address response times in reporting on the Communications Section.

TABLE 5-16: Average Dispatch, Travel, and Response Times for Community-initiated Calls for Service, by Priority, 2018 / 2013

	Dispatch Delay		Travel Time		Response Time		Calls	
Priority	2018	2013	2018	2013	2018	2013	2018	2013
1	1.7	1.7	4.9	4.7	6.6	6.4	721	688
2	11.5	6.9	6.4	6.2	17.9	13.1	17,664	14,410
3	27.0	13.6	9.6	9.8	36.5	23.3	4,859	6,071
4	24.6	13.6	7.3	8.7	32.0	22.2	2,138	2,516
Weighted Average/Total	**15.3**	**9.2**	**7.0**	**7.3**	**22.3**	**16.5**	**25,382**	**23,685**

Note: The total average is weighted according to the number of calls within each priority level.

In examining the data, it is noted that calls for service increased by approximately seven percent (23,685 vs. 25,382). However, overall response times increased by 35 percent (16.5 vs. 22.3 minutes). The vast majority of this increase is related to dispatch delay on low-priority calls. That suggests that commonly, no units are available within the call area (beat). While these are low-priority calls in terms of imminent safety issues, the caller generally believes that all calls to their police department are a high priority.

Table 5-17 reflects average response time for all community-initiated calls, by beat.

TABLE 5-17: Average Response Time Components, by Beat

Beat	Dispatch	Travel	Response	Calls	Area (Sq. Miles)
1	14.1	5.3	19.4	3,756	1.3
2	14.1	5.9	20.0	3,268	1.9
3	15.9	6.8	22.7	2,395	3.3
4	15.5	7.2	22.7	3,272	4.9
5	14.1	6.9	21.0	1,976	8.0
6	15.4	7.4	22.8	3,978	5.1
7	16.7	8.2	24.8	3,373	8.6
8	17.1	8.6	25.6	3,000	6.6
Other	11.8	9.4	21.2	364	NA
Weighted Average/ Total	**15.3**	**7.0**	**22.3**	**25,382**	**42.0**

SECTION 6. SUPPORT SERVICES BUREAU

INVESTIGATIONS DIVISION

The contracted scope of work for the Investigations Division as outlined by Carlsbad Police Department for the staffing assessment was limited to the General Investigations Unit. However, from a practical standpoint, a review of CPD investigative units where a staffing model can be applied against available investigator caseload provides a more comprehensive assessment. This expanded assessment of its investigative units to include General, Family Services, and Crimes of Violence provides CPD with a broader evaluation of investigative staffing needs.

Current Staffing

General Investigations

- 1 Sergeant.

- 4 Investigators.

- 1 Community Service Officer.

The General Investigations Unit handles investigations related to property crimes to include burglary, possession of stolen property, grand theft, petty theft, ID theft, fraud, embezzlement, and financial elder abuse.

Family Services

- 1 Sergeant.

- 3 Detectives.

- 4 School Resource Officers.

- 1 Community Service Officer.

The Family Services Unit handles investigations related to domestic violence, child abuse, elder abuse, sex offenses, and juvenile crime.

Crimes of Violence

- 1 Sergeant.

- 3 Detectives.

- 1 Community Service Officer.

- 2 Cal-ID Technicians .

The Crimes of Violence Unit handles investigations related to homicide, sexual assaults, kidnap felony assault, extortion, and robbery.

Case Management

As noted, CPSM examined the case management practices of the General Investigations, Family Services, and Crimes of Violence units and found this to be an area of opportunity for the CPD.

Case management, as part of a department-wide, integrated records management system, is a significant factor utilized by a department in the management of its investigative functions. At the time of the 2014 CPSM assessment of CPD, case management was limited to tracking workload on an Excel spreadsheet, which made it challenging to determine appropriate investigative staffing models. Shortly after that assessment, the Case Level Evaluation, Assignment and Tracking System (CLEATS) was implemented as an interim solution until a department-wide records management system could be deployed. Such a case management system was implemented by CPD in March 2017, with department-wide functionality achieved by October 2017. NETRMS by Motorola has been utilized since as the CPD Investigations Division's case management system and CPD's overall records management system.

In general, a case management process begins with the assigned sergeant reviewing the department report queue for new cases relevant to the unit. The cases are screened based on the department's case screening criteria and predetermined solvability factors. Also considered are the sergeants' knowledge of the investigative staff's current workload and consideration of the expertise each detective possesses in certain types of crimes. Based on this screening, cases are either assigned to an investigator, referred back to patrol for follow-up, or suspended pending development of further investigative information.

CPD lacks policy that outlines screening standards. Based on discussion with CPD staff, each units' case screening follows a format similar to that described above. However, the lack of documented department case screening standards forces sergeants to apply their own standards as they see fit, but these standards may not meet department expectations. A clear policy outlining department case screening criteria and those accountable for such screening should be developed, and approved by department command staff. During the CPSM assessment process, a case screening flow chart was created by CPD investigative staff to document CPD's current case screening practice; this flow chart should be considered as part of policy development.

Through discussion with staff, it was determined that NETRMS is not yet utilized by department managers and supervisors to assess individual or unit workload. More rigorous oversight of the progress of investigations would create a more efficient assessment and utilization of staff resources. For example, benchmarks could be set and tracked relative to investigations. Limits could be set on the amount of time to contact the complainant, file the first follow-up report, interview victims/witnesses, close a case, etc. Under CLEATS, 30/60/90 day case standards were utilized to track case status. Similar status reports have not been required since implementation of NETRMS. Investigators are required to submit cases to be closed for approval to the unit supervisor; however, there are no case closure standards in place. This means, among other things, that a case could remain open for a long time after investigative leads have been exhausted. There is no indication that cases are remaining open for extended periods, but there is no way of knowing either. Investigations management indicates that as a result of ongoing discussions between CPD and CPSM staff, case management benchmarks are being developed currently and are expected to be deployed in the coming months.

Going forward, case information needs to be extracted from NETRMS and massaged into relevant and timely management reports for investigative supervisors and department managers to analyze. The lack of a quantitative and qualitative assessment process limits CPD management's ability to evaluate the effectiveness of the department's investigative function and the success of its efforts to address crime in the community as a whole.

Case management also provides information that helps assess investigative staffing levels. Unfortunately, the absence of a robust case management system at CPD hampers CPSM's

ability to achieve complete confidence in its recommendations regarding CPD's investigations staffing.

In an order to assess CPD's staffing, current and historical case information was requested by CPSM. CPD Records processed 17,348 police reports from 2016 through 2018. As NETRMS is relatively new, only 21 months (March 2017 through 2018) of case data was available from this system to evaluate. CLEATS data was provided for 2016 and January and February 2017. Family Services data appears to have inconsistencies when compared to 2016 and 2018. Crimes of Violence case data also appears to have inconsistencies across the board as a significant drop in crime did not occur over the data period, which may have affected the unit caseload. Though a number of causal factors could be at play, a specific cause could not be identified during this assessment process. CPD staff is working with the San Diego County Sheriff's Office, the NETRMS managing agency, in an attempt to reconcile the case numbers. Case data transfer issues during the 2017 CLEATS/NETRMS transition may ultimately be determined to be the root cause of these issues.

In addition, investigations staffing was very inconsistent over the past couple of years due to staffing shortages caused by vacancies, illness, injuries, and other department priorities. In 2018 alone, as many as 62 different investigators, patrol officers, and CSO investigative aides (with a handful of overlaps) were assigned General, Family Services, and Crimes of Violence cases, according to NETRMS records. These units are currently budgeted for ten investigators total with each assigned a CSO investigative aide.

Of the 17,348 police reports prepared over the three-year data period, 5,117 were assigned for investigation, or 29.5 percent of all cases. Again, however, the data has some flaws. Using the data that is available, the assigned cases break down by unit as shown in Table 6-1.

TABLE 6-1: Investigations Case Tracking

	2016	%	2017	%	2018	%	Total	3-Year Ave.*
General Investigations	851	49	871	44	784	56	2,506	835
Family Services	548	31	896	45	515	36	1,959	653
Crimes of Violence	316	18	221	11	115	8	652	217
Total	1,715		1,988		1,414		5,117	

*CSO Investigative caseload not included.

A calculation of the average number of new cases per detective each month assumes that typically, an officer is normally unavailable two of twelve months each year due to illness, vacation, training, court, injuries, Family Medical Leave Act, administrative leave, etc. This average is based on CSPM's studies of more than 200 agencies.

The case data identified the average detective caseload for the three-year data period based on the number of detectives currently budgeted for each unit. For purposes of determining investigator caseload, cases assigned to CSOs (generally screened by unit sergeant as not requiring a sworn investigator) are not included in the caseload data. The average detective caseload was then determined as follows:

■ General Investigations: 835 cases/4 detectives = 17 cases monthly per detective.

■ Family Services: 653 cases/3 detectives = 18 cases monthly per detective.

■ Crimes of Violence: 217 cases/3 detectives = 6 cases monthly per detective.

Staffing decisions must also consider these numbers do not capture the entirety of an investigator's workload. The records management system is not designed to track the time that investigators spend assisting other investigators, both internally and for other agencies, work hours associated with investigations, including the most time-consuming cases, interviews, obtaining and serving search warrants, court time, travel time, etc.

There are no absolute standards to determine appropriate caseload for police investigators. One murder investigation could occupy the time of several detectives for months, and on the other hand, one detective could handle hundreds of theft cases in a similar period. Nonetheless, the International Association of Chiefs of Police suggests that a detective caseload between 120 and 180 cases per year (10 to 15 per month) is manageable.

Based on the available case data, the accuracy of which has been discussed here, CPSM recommends the addition of one General Investigations detective to reduce the annual detective caseload average from 209 to 167. CPSM recommends the addition of one Family Services detective to reduce the annual detective caseload average from 218 to 163. Based on the low annual caseload of Crimes of Violence detectives (72 cases per detective), no staffing increase is recommended. The caseload in the Crimes of Violence unit tends to include more complicated and long-term investigations based on the types of cases assigned, which drives the lower case-to-staff ratio compared to the other investigative units.

As additional NETRMS case data is accumulated and verified, CPD can evaluate the data periodically and apply the staffing standards noted in this report to determine the appropriate investigative staff level for the department and make necessary adjustments.

Clearance Rates

While preventing crime is crucial to law enforcement agencies, solving crimes is as important. Solving crime results in prosecution of offenders, which not only prevents future crime, it also provides much-needed closure to crime victims. The clearance rate is the relationship between reported crimes and persons arrested for those crimes. It is an important measure of the overall effectiveness of a police department and an important measure of the performance of an investigative unit in a police department.

Annually, departments report clearance rates to the FBI for inclusion in the UCR. In the CPD, this report is prepared by the Records Section based upon data entered into the records management system by Records staff. Investigations management indicated case clearances were not the division's responsibility and clearance rates were not reviewed or utilized to assess division performance.

Accurate case clearance is an important performance evaluation tool for supervisors. It is essential to track the effectiveness of individual detectives through their diligence in solving and clearing cases. Awareness of a detective's performance is critical to identifying increased oversight or training needs. The number of cases assigned per detective is important, as well as a supervisor's anecdotal knowledge, but performance evaluation must be supported by data. Clearance rates are also another benchmark of a department's effectiveness in solving crime and should be part of the Investigation Division's evaluation process. See the Records section of this report for additional discussion on UCR clearance rates.

Table 6-2 reflects the most recently published UCR data as reported by the department. CPSM noted that the department's stated clearance rates across the board were fairly consistent with state and national clearance rates.

TABLE 6-2: Reported Carlsbad, California, and National Clearance Rates, 2017

Crime	Carlsbad			California			National		
	Crimes	Clearances	Rate	Crimes	Clearances	Rate	Crimes	Clearances*	Rate
Murder/Mansltr.	0	0	NA	1,829	1,144	63%	15,657	9,645	62%
Rape	30	6	20%	14,724	5,427	37%	121,084	41,774	35%
Robbery	46	17	37%	56,609	17,324	31%	293,160	87,069	30%
Agg. Assault	171	96	56%	105,391	56,227	53%	747,731	398,541	53%
Burglary	432	38	9%	176,638	18,871	11%	1,281,083	172,946	14%
Larceny	1,638	157	10%	641,804	69,636	11%	5,072,970	974,010	19%
Vehicle Theft	139	21	15%	168,327	15,336	9%	720,346	98,687	14%

*Note: Clearances were calculated from crimes and rate, as these numbers are not directly available from FBI.

Investigations Recommendations:

■ A clear policy that outlines department case screening criteria and those accountable for such screening should be developed and approved by department command staff. (Recommendation No. 13.)

■ The case screening flow chart recently developed by CPD should be considered as part of policy development. (Recommendation No. 14.)

■ A policy should be developed that requires that NETRMS be utilized by department managers and supervisors to assess individual and unit workload. (Recommendation No. 15.)

■ Develop benchmarks to track individual investigation progress from assignment to include case closure standards and required approvals. (Recommendation No. 16.)

■ Extract case information from NETRMS and massage this information into relevant and timely management reports for investigative supervisors and department managers so they may analyze and evaluate the effectiveness of the department's investigative function. (Recommendation No. 17.)

■ Continue to evaluate NETRMS data for clarity and consistency to ensure the input provides a level of confidence in the resulting output for caseload assessment and analysis of the investigative function. (Recommendation No. 18.)

■ CPSM recommends the addition of one General Investigations detective to reduce the annual detective caseload average from 209 to 167. (Recommendation No. 19.)

■ CPSM recommends the addition of one Family Services detective to reduce the annual detective caseload average from 218 to 163. (Recommendation No. 20.)

■ Management of the Investigations Division should review case clearance rates to assess bureau effectiveness in solving crime and the effectiveness of individual detectives. (Recommendation No. 21.)

■ Periodic training for Records and Investigations staff is recommended regarding FBI case clearance guidelines to ensure correct reporting of UCR statistics. (Recommendation No. 22.)

COMMUNICATIONS

The Communications Division serves as the Public Safety Answering Point (PSAP) for the Carlsbad Police Department (CPD). The dispatch/communications function is a vital component of an effective law enforcement agency. 911/dispatch operators serve in two primary roles: (1) answering 911 and non-emergency telephone calls, and (2) radio dispatch duties. In the case of CPD, all full-time personnel are cross-trained in both roles.

Often the first point of contact for a citizen seeking assistance, 911 operators play a significant role in setting the tone for the community's attitude toward the agency. The efficiency with which they collect information from callers and relay that information to responding personnel significantly impacts the safety of citizens and officers alike. And for crimes in progress, their work substantially affects the chances of apprehending criminals.

The Communications Division can and should serve as an important addition to the investigative effort for in-progress crimes or the active search for wanted suspects. As officers search for suspects in the field, Communications staff can simultaneously search various computer databases, technology sources, and social media platforms for information that may be of value to the investigative effort. This can apply to missing persons as well. CPD staff advised that all efforts are made in this area when adequate staffing exists.

Communications Staffing

The Communications Division and its personnel operate under the direction of a civilian manager. The manager is supported by four shift supervisors. Sixteen full-time and one part-time dispatch positions round out the authorized staffing for the unit. At present, the unit is fully staffed. Dispatchers play a dual role in the center, with one assigned as the primary radio operator and remaining staff assigned as call takers and secondary radio operators.

Table 6-3 reflects all authorized (budgeted) staffing assigned to Communications as indicated above. It depicts authorized positions, actual staffing, and vacancies.

TABLE 6-3: Communications Personnel

Rank	Authorized	Actual	Vacant
Manager	1	1	0
Supervisor	4	4	0
Dispatcher (Full-time)	16	16	0
Dispatcher (Part-time)	.5	.5	0
Total	**21.5**	**21.5**	**0**

The position of 911/Dispatch operator involves challenging and stressful duty. Virtually every agency studied by CPSM reports that finding qualified applicants who can complete the rigorous training program required to perform these duties is a struggle. This is consistent with the experience of CPSM staff in the agencies that employed them as law enforcement officers. CPD has had success outside the norm, which speaks to its hiring, selection process, and work environment. The manager attributes the success to a modification in hiring practices which allows him to interview applicants even though a testing process may not be open at the time. Also, department background investigations have been outsourced, which expedites completion of the hiring process. This also helps the Communications team's morale by eliminating long periods of working with vacant positions.

Relative to supervisory positions, it must be noted that in most law enforcement agencies of the CPD's size, dispatch supervisors frequently and appropriately perform some routine dispatch and call-taker duties. CPD utilizes supervisors at an acceptable rate as a result of the current staffing level, which only intermittently requires supervisors to fill the dispatcher role. It is important, however, that CPD not come to rely upon supervisors to routinely perform these line duties at the peril of failing to perform their role as supervisors. Doing so could impact their ability to perform a myriad of supervisory as well as associated administrative duties. It can also undermine supervisory authority among their subordinates, who may come to look at them as peers.

As workload data is examined, staffing levels will be reviewed and recommendations made regarding staffing adjustments as warranted. These recommendations will be reflected in a *Staffing Summary* subsection that will follow our workload assessment.

Work Schedules

At present, dispatchers work a 3/12 schedule, with alternating three-day and four-day work weeks. Under this schedule, one day of the four-day work week involves an eight-hour shift, which enables the employee to reach 160 hours of work over a 28-day period. To address minimum staffing issues, CPD employs several strategies in addition to the part-time employee's flexible scheduling. Based on seniority, each dispatcher is placed on-call for two days each month on a rotating basis. If the unit falls below minimum staffing, the on-call employee for the day is required to respond to the Communications Center. The employee is compensated for on-call time and receives regular or overtime pay, as the case may be, if they are called in to work. A second option utilized is paying an off-duty dispatcher overtime for three hours of work to cover lunches and breaks. Four-hour shift holdovers are also used on eight-hour shift days. The strategies employed are determined by supervisors to make the most efficient use of resources.

The budgeted, non-benefited, part-time position is used by management to hire desirable lateral candidates willing to work part-time in anticipation of a full-time position. After completing training, the part-time employee is utilized as relief for employee leave as needed. This temporary position also gives management a period of evaluation of a new employee who has limited civil service protections.

As noted, there are presently four communication supervisors. All supervisors work a 3/12 schedule in the same format as described above for dispatchers. There are no supervisor relief personnel. In the absence of a supervisor, an acting supervisor may be designated. A patrol supervisor is available to provide direction as needed when no Communications supervisor is available.

Table 6-4 reflects this work schedule and staffing as presently available and assigned.

TABLE 6-4: Communications Division Work Schedule

Shift	Work Schedule	Average # Staff Presently Available for Duty*
D-1 Sunday – Tuesday (Plus every other Wed.)	4:00 a.m. to 4:00 p.m.	4 Dispatchers 1 Supervisor
D-2 Thursday – Saturday (Plus every other Wed.)	4:00 a.m. to 4:00 p.m.	4 Dispatchers 1 Supervisor
E-1 Sunday – Tuesday (Plus every other Wed.)	4:00 p.m. to 4:00 a.m.	4 Dispatchers 1 Supervisor
E-2 Thursday – Saturday (Plus every other Wed.)	4:00 p.m. to 4:00 a.m.	4 Dispatchers 1 Supervisor

*Note: It is important to note that these staffing numbers reflect total personnel presently available for full duty as per Table 6-3. Also, these numbers do not factor in time off due to vacation, illness, mandatory training, etc. Based upon scheduled time off, the actual number of personnel reporting for duty on a scheduled shift will be approximately 20 percent to 25 percent lower than is reflected.

Minimum Staffing

The department's minimum staffing objective is three dispatch personnel at all hours for all shifts. This minimum staffing level is an increase as recommended in the 2014 CPSM assessment. After that earlier CPSM study, two full-time dispatcher positions were funded to increase minimum staffing to present-day levels. It is important to note that as we discuss minimum staffing, it is just that, minimum, not optimal.

And, as reflected in Table 6-4, at present, if all existing authorized personnel report to work on all shifts, dispatch operates above minimum staffing throughout the day. As personnel take scheduled or unscheduled leave due to training, vacation, illness, FMLA, etc., staffing can fall below the levels indicated. However, CPD staff reported that staffing dips to the minimum only occasionally at a rate of one day out of seven. As this occurs, the strategies described above are employed. For FY 17/18, 2,083 overtime hours were expended to meet minimum staffing. When this number of hours is translated to a full-time equivalent (FTE) position, it equals 1.00 FTE position. However, with the sporadic nature of the overtime use, the utilization of the previously described staffing strategies to address minimum staffing is more cost-effective and provides scheduling flexibility, thus negating the need to hire an additional staff member.

As previously noted, there are two primary duties in dispatch centers; (1) radio dispatch, and (2) answering 911 emergency and general telephone calls. Best practices for a city of this size and call volume call for (1) a lead dispatcher who is responsible for all radio communication between field units, with no telephone answering responsibilities, (2) a back-up dispatcher who provides support to the lead dispatcher, monitors secondary radio frequencies, and may be called upon to support 911 call takers, and (3) a sufficient number of calls takers to generally manage all incoming calls, both 911 and general calls. Given these generally accepted staffing and deployment practices, CPSM asserts that the minimum staffing as established by the department is at an appropriate level.

Call/Workload Demand

In addition to serving as the 911 Public Safety Answering Point (PSAP) where all 911 calls are received, dispatch also receives various other calls via the department's telephone lines. In 2018, the unit answered a total of 113,402 incoming telephone calls and a total of 328,241 over the last three years. This is a 7.8 percent increase in call volume over the past three years.

Current year call volume equates to an average of one call every 4.64 minutes. Of course, call volume would be higher during peak activity times, and lower during slower times of the day. Of total calls, 32,509 (28.7 percent) were 911 calls. The remaining 80,893 (71.3 percent) were non-emergency and/or general business calls. This represents a significant volume of non-emergency call activity for the center. In addition to the incoming calls, the Communications Division made more than 43,086 outgoing calls. The ratio of outgoing calls to incoming calls is generally consistent with other law enforcement agencies. Ninety-eight percent of 911 calls were answered within ten seconds, exceeding the National Emergency Number Association (NENA) standard of 95 percent within 15 seconds; 99 percent of 911 calls were answered within the 15-second standard, and 98 percent of 10-digit lines were answered within ten seconds. All of these tasks were completed well within industry standards.

Table 6-5 compares incoming call demand from 2016 through 2018.

TABLE 6-5: Telephone Incoming Call Load and Radio Dispatches by Year*

	2016	2017	2018
All Calls	105,231	109,608	113,402
911 Calls	27,410	29,145	32,509
911 % of Total Calls	26.0%	26.6%	28.7%

*Source: Carlsbad PD

CAD data revealed that 48,403 calls for service were dispatched to CPD units (Patrol, Traffic, CSO) in 2018. In CPSM studies, it is common to find that the hours between 8:00 a.m. and 8:00 p.m. represent those that are busiest for most communication centers relative to telephone calls, though this varies somewhat from agency to agency based upon community demographics. To examine this, CPSM requested telephone call data by hour to enable our analysis. Table 6-6 shows call activity by hour of day for calendar years 2016, 2017, and 2018. In the case of Carlsbad, the hours between 8:00 a.m. and 8:00 p.m. also reflect the highest call volumes.

TABLE 6-6: Total and Average Daily Telephone Call Volume by Hour, 2016–2018*

Hour of Day	Call Volume			Daily Average
	2016	2017	2018	
Midnight	2,222	2,384	2,465	6.46
1:00 a.m.	1,893	1,947	1,961	5.30
2:00 a.m.	1,809	1,784	1,666	4.80
3:00 a.m.	1,390	1,520	1,454	3.99
4:00 a.m.	1,149	1,264	1,357	3.44
5:00 a.m.	1,409	1,489	1,734	4.23
6:00 a.m.	2,218	2,208	2,454	6.28
7:00 a.m.	4,033	4,052	4,365	11.37
8:00 a.m.	5,603	5,808	6,091	15.98
9:00 a.m.	5,893	6,171	6,472	16.93
10:00 a.m.	6,517	6,576	6,958	18.31
11:00 a.m.	6,466	6,899	7,252	18.83
Noon	6,574	6,683	7,046	18.54
1:00 p.m.	6,692	6,831	7,130	18.86
2:00 p.m.	6,662	6,942	7,267	19.06
3:00 p.m.	6,822	6,971	7,333	19.29
4:00 p.m.	6,420	6,853	7,179	18.68
5:00 p.m.	6,357	6,718	6,877	18.22
6:00 p.m.	5,472	5,930	5,693	15.61
7:00 p.m.	4,873	4,990	5,011	13.58
8:00 p.m.	4,426	4,738	4,726	12.68
9:00 p.m.	4,111	4,127	4,093	11.26
10:00 p.m.	3,395	3,690	3,735	9.88
11:00 p.m.	2,825	3,033	3,083	8.17
Total	**105,231**	**109,608**	**113,402**	**299.76**
Three-year Total	**328,241**			

*This does not include radio traffic workload.

Table 6-7 reflects call volume by hour of day relative to shift schedules for calendar years 2016, 2017, and 2018.

TABLE 6-7: Average Daily Telephone Call Volume by Hour by Dispatch Shifts, 2016–2018

D1 and D2			E1 and E2		
4:00 a.m.	3,770	1.15%	**4:00 p.m.**	20,452	6.23%
5:00 a.m.	4,632	1.41%	**5:00 p.m.**	19,952	6.08%
6:00 a.m.	6,880	2.10%	**6:00 p.m.**	17,095	5.21%
7:00 a.m.	12,450	3.79%	**7:00 p.m.**	14,874	4.53%
8:00 a.m.	17,502	5.33%	**8:00 p.m.**	13,890	4.23%
9:00 a.m.	18,536	5.65%	**9:00 p.m.**	12,331	3.76%
10:0 0a.m.	20,051	6.11%	**10:00 p.m.**	10,820	3.30%
11:00 a.m.	20,617	6.28%	**11:00 p.m.**	8,941	2.72%
Noon	20,303	6.19%	**Midnight**	7,071	2.15%
1:00 p.m.	20,653	6.29%	**1:00 a.m.**	5,801	1.77%
2:00 p.m.	20,871	6.36%	**2:00 a.m.**	5,259	1.60%
3:00 p.m.	21,126	6.44%	**3:00 a.m.**	4,364	1.33%
	187,391	**57.09%**		**140,850**	**42.91%**

Previously, we discussed the division's work schedule (Table 6-4). The two primary reporting times are 4:00 a.m. and 4:00 p.m. In comparing work schedules with telephone call demand (Tables 6-5, 6-6, and 6-7) and calls for service activity outlined in the CPSM Data Report, the deployment schedule reasonably matches call workload demand and call for service activity within the established shift parameters.

Communications is the general phone answering point for the department during non-business hours. As was previously indicated, for 2016 through 2018, an average of 72.9 percent of telephone calls received by Communications were non-911 calls. While some of these calls are appropriately handled by dispatch, in many cases, dispatch simply reroutes the caller to the appropriate party. In a recent study, another department reported this to be the case for 31 percent of all calls. Carlsbad does not track this number; however, staff reported that transfer of in-coming telephone calls is routine. The 2014 CPSM report recommended CPD explore options to reduce the volume of non-essential calls into Communications. CPSM has been advised that an executive decision was made at that time to continue accepting the calls in Communications so persons calling for assistance would be greeted by an employee, not an employee's voicemail. Unfortunately, it was reported to CPSM that currently a significant majority of the calls internally transferred by Communications to other department personnel ultimately are answered by a voicemail system anyway.

While the unit or party to which the call is transferred varies, it was reported that many of the transferred calls are from a citizen seeking to contact an officer who had previously handled a call for service with the calling party. Though each officer is issued a department cell phone, not all officers' business cards reflect the officer's individual cell phone number, hence the calling party utilizes Communications to connect them to the desired officer. CPD should ensure that all personnel are required to reflect their department cell phone number on their business cards, and that each officer be required to regularly review and respond to phone messages. This

should aid in reducing the number of transfer calls through Communications. These non-emergency calls have a significant negative impact on the 911/dispatch operation and should be further addressed by the department should the above action be insufficient to reasonably reduce the number of such calls.

Communications received 526 PRA requests in 2018. These requests were for phone and radio traffic recordings. Requested recordings are handled by a Communications supervisor or the manager. Most of the recordings are downloaded into the County Qtel system to be available to officers and the D.A.'s office. Recordings for DMV or private attorneys are copied onto disks for the requesting party. The time needed to copy the recordings varies by the incident type and the data requested. If only the 911 call is needed the process can be completed in 15 to 20 minutes. Requests that also include the radio traffic can take significantly longer, up to 60 minutes. The estimated average time to prepare the recordings for all requests is 30 minutes. The PRA requests are generally forwarded to Communications by Records. Records prepares the department's PRA response to the concerned party upon receipt of the requested recording. These tasks should be absorbed by the CPSM-recommended Discovery Unit (see *Records Division* section of this report for detail).

Impact of Technology

In 2014, CPD was found to be one of the least technologically sophisticated departments that CPSM has evaluated. Since that time, CPD has made great strides in acquiring and implementing technological resources throughout the department. These resources utilized and/or accessed by Communications include license plate reader cameras, 3Si Alarms (banks, and department-deployed bait bikes/vehicles/property), station CCTV cameras, CCTV cameras in city parks, various websites (Findum/Sendum, Blackboard Connect, Take-Me-Home Registry, Drug ID, One-Call-Now SWAT notification, social media, Vigilant LPR Date files, CHP CAD, VIN Assist), and county, state, and federal databases.

As a result, in addition to answering 911 and non-emergency telephone calls and handling radio traffic, dispatchers are expected to monitor and respond as appropriate to video camera images and technology resources. This responsibility includes 75 security cameras and 51 license plate reader (ALPR) cameras, with more to be added soon, strategically located throughout the city. When a crime occurs, dispatchers are charged with not only dealing with the caller, dispatching units, and providing call information, but also reviewing the camera feeds and noted technology resources and relaying information to the units in the field. While the available technology provides exceptional tools for aiding responding officers, the volume of information coming into and available to Communications staff can be a burden at times. Other emerging technologies, such as body-worn cameras, video door bells, Text-to-911, and language translation lines, which are at various stages of deployment, along with other yet-to-be-developed systems, will have further impact on PSAP staffing.

PSAP centers across the country are dealing with these same issues. In discussions with Communications management, it was indicated this trend has not yet reached a level that requires additional staff within CPD. It is feasible that in the not-too-distant future a "technology" desk may become an industry-wide part of communications center staffing, similar to primary dispatcher, backup dispatcher, and call taker positions today. Any such staffing evaluation should also include a technology assessment to ensure only truly beneficial systems are deployed in a communications center.

Dispatch Staffing Summary

At present, CPD Communications is authorized four supervisors. Providing 24/7 supervisory coverage would require 4.3 FTE (full-time equivalent) positions. The current staffing level allows for supervisory oversight for each of the four primary shifts (Day 1, Day 2, Evening 1, and Evening 2). Even at that, when factoring in leave time, some shifts will continue to rely on acting supervisors or patrol supervision. That dilemma is a reality of shift work.

Communications is currently authorized 16 dispatchers and has no existing vacancies. As noted, the addition of the two staff dispatchers as a result of the 2014 CPSM study enabled consistent minimum staffing across the work schedule. In the occasional instance when a minimum staffing level is reached, the staffing strategies utilized to mitigate intermittent staff shortages appear to be efficient and economical. As noted previously, the department expended 2,083 hours of overtime in 2018 in order to cover staff training and leave time. Although this number of hours roughly equates to 1.0 FTE, the overtime use schedule varies from month to month, so an additional staff member working on a set schedule would not address the overtime issue in an efficient way.

In our examination of staffing and workload demands, we found that the authorized staffing levels for both dispatch supervisor and dispatcher currently meet the needs of the CPD Communications Division. The staff appear to handle all radio traffic, telephone calls, and related duties with the efficiency and effectiveness expected by the city and department. As new technology tools are deployed, staffing levels can be examined to meet increased workload.

High-priority Calls

The computer-aided dispatch (CAD) system has been programed to assign priorities to calls based upon the nature of the call. The department assigns calls as priority 1 through priority 4, with priority 1 as the highest priority. Table 6-8 reflects average response times by priority.

TABLE 6-8: Average Dispatch, Travel, and Response Times, by Priority

Priority	Dispatch Delay	Travel Time	Response Time	Calls
1	1.7	4.9	6.6	721
2	11.5	6.4	17.9	17,664
3	27.0	9.6	36.5	4,859
4	24.6	7.3	32.0	2,138
Weighted Average/Total	**15.3**	**7.0**	**22.3**	**25,382**

Note: The total average is weighted according to the number of calls within each priority level.

Figure 6-1 focuses on the response time and dispatch delay for priority 1 calls only, and reflects data based upon the hour of day.

FIGURE 6-1: Average Response Time and Dispatch Delay for High-priority Calls, by Hour
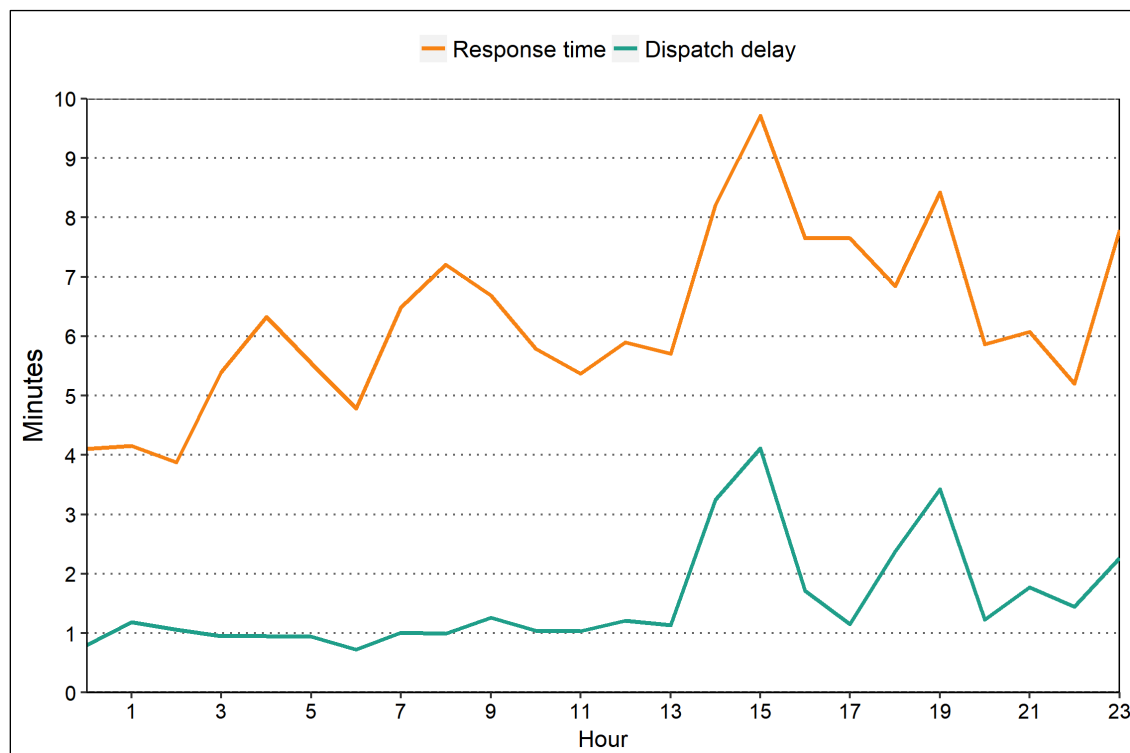
Data calculations are based on what is commonly practiced at law enforcement agencies—a call taker receiving a call types the information into a call screen, electronically sends it to the dispatcher, and the call is broadcast and assigned to an officer to handle. The dispatch period is measured from the time of call receipt, ending when the dispatcher assigns an officer to that call. The travel period begins at the conclusion of the dispatch period and ends when the officer arrives at the scene of the call. The response time represents the combination of the dispatch and travel periods. This is the amount of time it takes from the initial call to an officer arriving on scene.

The CPD Communications dispatch delay for priority 1 calls of 1.7 minutes represents 25.7 percent of the total response time of 6.6 minutes experienced in Carlsbad. In terms of response time, reducing this 25.7 percent segment is highly desirable. This delay level is similar to that noted in the 2014 report. For life-safety and in-progress crime calls, every second can count. The Communications manager indicated the goal for priority 1 calls is to obtain information from the caller in 30 seconds and dispatch in 30 seconds. That is to say, the call taker obtains minimal pertinent information (crime and location) and sends the information to the dispatcher for broadcast, while continuing to collect additional information. The assigned unit(s) are provided the additional information from the dispatcher while responding to the call. The manager indicated unit availability is the primary hindrance to immediate dispatch of priority 1 calls. As indicated in Figure 6-1, delays generally occur around evening shift changes when unit availability dips. These calls, based upon data provided, amount to an average of fewer than

two per day; however, they are potentially the most significant calls to which the department responds.

A team from Communications and Operations should jointly examine ways to reduce the 1.7-minute dispatch delay of not only priority 1 calls, but the dispatch delay of all calls to field units. In the Operations section of this report, we showed that the overall response times have increased by 35 percent since the previous CPSM study, with the majority of this increase related to dispatch delay on low-priority calls. Field unit availability was also cited as a common factor in these delays. The effort to resolve this issue will provide for increased victim safety and enhanced opportunities for apprehension of suspects, and will also give the community the belief that all calls to their police department are a high priority.

Quality Control Audits

Periodic review of random recorded phone calls and radio activity handled by each dispatcher/call taker is important to ensure quality control and help to identify training and/or performance issues. CPD supervisors conduct monthly audits for all staff. The audit involves review of recorded conversations between the parties to include a priority 1 call, a second random call, and a transferred call. A 24-point call taker check-off form is utilized to document the audit, which assesses information gathered, timeliness of call entry to creation, overall demeanor and empathy, etc. A 16-point dispatcher check-off form is utilized to document the audit, which assesses compliance with radio protocols, clarity and accuracy of information provided, overall demeanor, etc. Audits are an important aspect of managing a 911/dispatch operation and the department is to be commended for its commitment to this effort.

Communications Recommendations:

- Ensure that reliance upon supervisors to intermittently perform line duties does not interfere with them performing their role as supervisors. (Recommendation No. 23.)

- Ensure that all personnel are required to reflect their department cell phone number on their business cards to aid in reducing the number of calls handled by Communications. (Recommendation No. 24.)

- Require that each officer regularly reviews and responds to phone messages. (Recommendation No. 25.)

- Communications PRA requests should be absorbed by the CPSM-recommended Discovery Unit (see *Records Division* section of this report for detail). (Recommendation No. 26.)

- As new technology tools are deployed in the future, evaluate Communications staffing levels to meet increased workload to potentially include a "technology" desk. (Recommendation No. 27.)

- A team from Communications and Operations should jointly examine ways to reduce dispatch delays of all calls to field units. (Recommendation No. 28.)

HOMELESS OUTREACH TEAM (HOT)

Much like other communities, the City of Carlsbad has experienced an increase in issues related to homelessness, including increased calls for emergency and police services, and citizen complaints. Residents and other community members, including business owners, requested a response from the city to address the increasing impacts associated with this challenging issue, both to the homeless individuals themselves and to the surrounding community. In late 2017, the city developed and began implementation of the Homeless Response Plan. The Homeless Outreach Team (HOT) came to fruition in conjunction with this city-wide plan.

The HOT has many responsibilities, with an overall goal of providing services to the area homeless while reducing homelessness overall, and applying the law when necessary through compassionate enforcement. The Carlsbad homeless population in 2018 was estimated to be 210 individuals, including 152 unsheltered homeless, which was a 50 percent increase from 2017. The results of a January 2019 homeless count was pending as of this writing.

Some duties of the Homeless Outreach Team include:

- Make consistent and frequent contact with the homeless and seek opportunities to connect the homeless residents with appropriate resources and services.

- Focus on the clean-up of homeless encampments and take other actions to address community concerns as related to the homeless residents, including any related criminal activity.

- Coordinate with other departments for resource referrals, and other municipalities and the county to provide resources, as available, and make enforcement efforts more effective.

- Conduct community outreach and education to social service agencies, churches, and others.

- Respond to citizen requests for addressing impacts of the homeless and homelessness.

The Homeless Outreach Team is staffed by two full-time police officers, whose positions were added to the department budget as part of the Homeless Response Plan. The HOT works a 4/10 schedule, deploying Monday through Thursday from 7:00 a.m. to 5:00 p.m. Each HOT member drives their own department vehicle, but as necessary, the team members work in combination based on the mission for the day for officer safety and efficiency. The team vehicles are being transitioned from unmarked SUVs to pickups to better facilitate team duties. Although organizationally the team is supervised by the Crime Suppression Team/Homeless Outreach Team sergeant, the assigned officers function independently of the CST. Assignment to the HOT team is limited to two years to minimize the impact of the duties on assigned staff. CPSM believes this assignment period should be for a longer term in the range of five years. The homeless population tend to be relationship and service adverse. Once confidence is gained it can be disruptive to department efforts and relationships with the homeless to cycle staff too frequently.

Since its inception, the HOT has created collaborative partnerships with many stakeholders in the community, including city, county and private entities, in their effort to provide services and impact the homeless population with a complete, comprehensive approach. The team works with social workers, psychological services, and health services workers, including Interfaith Community Services, which provides two full-time licensed clinical social workers (LCSW) funded by the city to deliver individualized services those in need in the community. Periodically, these representatives ride along with the team members, providing the opportunity for side-by-side coordination of the delivery of services.

The HOT tracks daily contacts, the number of homeless taken off the street, those for whom services were provided, including the number of people placed into temporary shelters, and other team activities. These other activities include arranging medical and other benefit service appointments, to include transporting individuals to these appointments. HOT members should consider identifying and prioritizing intervention with homeless individuals who generate the greatest number of calls for services to reduce costs to the city and improve quality of life. Communication between patrol and HOT is essential to coordinate these efforts.

Table 6-9 reflects the type of action taken since the team's deployment, which began in June 2017. CPD staff indicate these numbers are likely lower than actual activity levels, since at times circumstances make it difficult to keep up on stats and properly log them with Communications. Although statistics do not provide the full picture of the HOT's impact on the homeless population, they can provide some indication of return on the city's investment in the Homeless Response Plan. The HOT should make a concerted effort going forward to accurately qualitatively and quantitatively track their efforts. Periodic status reports should be prepared for concerned department and city staff. Department management should utilize this reporting to advocate for and evaluate its efforts to address the homeless issues in the city.

TABLE 6-9: Homeless Outreach Team Activity, 2017–2018

Activity	2017–2018*
Contacts	2,818
Meetings Attended	61
Shopping Carts Removed	55
Service Referrals	2,818
Arrests	160
5150 Commitments	8
Crime Reports	226
Sent Home/Relocated	11
Citations Issued	102
Camps Cleaned	200
Camps Posted	200

*June 2017–February 2019

The make-up of Carlsbad's homeless population is similar to many cities which offer a wide range of services. The amount and quality of services offered by a city becomes known in the homeless community, which has a surprisingly broad reach. This reputation draws homeless from across the region, other areas of the state, and in some cases from across the country. The population includes both young and old, all with their own individual circumstances that led them to be part of the Carlsbad homeless population.

CPD reports a marked increase in homeless-related and mental illness-related calls for service over the last year throughout the city and which are handled by both patrol personnel and the HOT.

Statistics provided by CPD show that the department overall responded to over 4,000 transient-related incidents and detained 542 mentally ill persons. The 4,200 incidents equate to approximately 11 police responses per day regarding homeless incidents. The 542 reported 5150 detentions equate to 1.5 per day. These numbers are inclusive of HOT activities.

Carlsbad's local emergency shelter, Tri-City Hospital Behavioral Health Unit, closed recently, which limits HOT and patrol officers' options for 5150 services. This closure also increased officer drive time to the only available mental health facility located in downtown San Diego, impacting resources in the city while transporting mentally ill detainees.

Many agencies in California and across the country employ homeless outreach teams in full-time partnership with licensed clinical social workers (LCSWs) who have expertise in providing social services and mental health evaluation as a means of providing a consistent service, while at the same time lessening the workload on patrol personnel. These teams have the necessary expertise, including knowledge and access to mental health and homeless services in the region, and the county as a whole, to more appropriately and efficiently address mental health and homeless concerns.

CPSM recommends modifying the current HOT configuration to create three teams consisting of a police officer and a licensed clinical social worker (LCSW). This would require an additional FTE police officer and three FTE LCSWs to staff the three teams. This configuration would broaden HOT's reach to provide evening and weekend response. The enhanced staffing could actively solve problems and address community homeless issues in an even more meaningful way beyond the current staff's ability. The enhanced teams would be equipped to address the increase in homeless and mental illness-related calls for service reported by CPD. As the city currently provides monies to Interfaith Community Services for two full-time licensed clinical social workers, these funds could be redirected to city-employed LCSWs or the collaborative effort with ICS could continue. With either path, additional monies would be required for a third LCSW. In addition, with the increase in HOT team size, adding a sergeant to supervise the teams is recommended. Funding limitations for groups currently collaborating with HOT may hamper their ability to grow with this expansion unless additional funding sources are identified.

The City of Carlsbad and the police department have refocused their efforts on the needs of the city's homeless with the implementation of the Homeless Response Plan. The city has developed collaborative efforts with area stakeholders to expand its reach within the homeless community to provide services and address homeless-related impacts on the community. A lawsuit was recently filed against several Orange County, Calif., cities and the Sheriff's Department alleging not enough services and shelters were being provided for homeless populations. The complaint, filed on behalf of three homeless persons and three homeless advocacy groups, argues that anti-camping ordinances and other laws violate their civil rights. Lack of shelter and the criminalization of the homeless forced to sleep in public were issues also included in the complaint. These mirror a federal civil rights suit pending against the City of Santa Ana for removing homeless encampments from the city. According to reports, several of the named cities believed they were providing appropriate services to their homeless population. Carlsbad's administrators and elected officials, while working with homeless advocate groups, should continually monitor their efforts to aid the homeless to ensure the city is providing the appropriate level of services and meeting the expectations of the community.

HOT Recommendations:

- CPSM recommends the HOT staff be assigned for five-year periods to enhance staff relationships with clientele served. (Recommendation No. 29.)

- HOT members should consider identifying and prioritizing intervention with homeless individuals who generate the greatest number of calls for services in order to reduce costs to the city and improve quality of life. (Recommendation No. 30.)

- The HOT should accurately track its efforts in both qualitative and quantitative terms. (Recommendation No. 31.)

- CPSM recommends creating three two-person HOT teams consisting of a police officer and a licensed clinical social worker to support patrol and HOT personnel; this would require an additional police officer FTE and three LCSW FTEs. (Recommendation No. 32.)

- With the increase in HOT team size, adding a sergeant to supervise the teams is recommended. (Recommendation No. 33.)

- Carlsbad's administrators and elected officials should continually monitor the city's efforts to address homeless issues to ensure it is providing the appropriate level of services and meeting the expectations of the community. (Recommendation No. 34.)

RECORDS DIVISION

Contrary to the common perception that functions performed in law enforcement records sections are as simple as filing reports and providing copies as needed, there is an exhaustive list of duties performed. A police department's records section is daily called upon to: review and process citations and incident reports; conduct criminal history checks; answer telephone calls related to the records operation; handle walk-in customers at the front desk; organize and maintain reports in various databases; upload and maintain digital photographs; maintain records on incarcerated individuals; respond to document and/or photographic image requests from the public and law enforcement/criminal justice community; register sex offenders; prepare and distribute reports for prosecutors and others; maintain information on local wanted/missing persons and property in local, state, and federal databases; accept and process various civil papers for service; monitor and respond to requests received through the agency's central email box; conduct background checks for employment and prepare clearance letters; respond to requests for the release of various documents/video and voice data/photographs as required under the Freedom of Information Act; receive and distribute incoming and outgoing mail; purge records as directed by the prevailing record retention schedule; order and maintain department supplies for records-related duties; prepare statistical reports including those for the State of California and the FBI; and more.

The Carlsbad Police Department policies do not reference the functions and responsibilities of the Records Division in detail. Policy 806, Records Division, and Policy 810, Records Maintenance and Release, provide a minimal outline of a small portion of Records' activity. The department should consider developing a section within the policy manual specific to the Records function. This will ensure that Records staff can more easily comply with legal mandates and department operating guidelines. Records should also develop a procedural manual for staff reference, improved consistency, and guidelines for new employees.

Records Management System

The records management system used by the CPD is NETRMS, which is an integrated law enforcement software product offered by Motorola. CPD also uses NETRMS department-wide for its CAD, Property and Evidence function, and Investigations. This system has been in place since March 2017. Records staff report the system is a significant upgrade in their records management process and its implementation has provided CPD with its first integrated records management system. Initial issues with the system have been resolved as department staff have gained experience in the system's use.

Records Staffing

The Records Division falls under the direction of the Captain of the Support Bureau; however, day-to-day management of Records is the responsibility of the Records Manager, who also manages the Property and Evidence Division (P/E). The authorized staffing for the unit includes the manager, four records specialists, and one half-time administrative assistant position. Two employees job-share one records specialist position.

The Records Division was staffed by 5.5 specialist positions until three years ago, when one Records FTE was moved to Property and Evidence to address a line staffing need, reducing Records to 4.5 FTE positions. Today, as has been the case for some time, a P/E staff member frequently assists Records with necessary duties due to workload, including mandatory lunch breaks.

CPSM recommended in the 2014 report that a P/E supervisor position be created to be responsible for the overall management of property and evidence. The report supported this recommendation by outlining potential issues of mismanagement of evidence or property that can seriously jeopardize the prosecution of criminal cases and unnecessarily expose the department to liability, though finding no evidence to suggest deficiencies in CPD at the time of the report. Based on today's organizational chart, the Records manager was designated as P/E manager in lieu of the recommendation, and now manages both the records function and the P/E function. The Records manager asserts she spends 80 percent of her time with Records and 20 percent of her time with P/E, though admittedly states P/E is not getting the oversight it needs, due to the workload the manager faces in Records.

Table 6-10 reflects all staffing assigned to Records. It shows authorized positions, vacancies at present, and actual staffing.

TABLE 6-10: Records Unit Personnel

Rank	Authorized	Actual	Vacant
Records Manager	1	1	0
Records Specialist	4*	4*	0
Administrative Assistant	.5	.5	0
Total	**5.5**	**5.5**	**0**

*One records specialist position is job-shared by two employees working 20 hours per week each.

In the introduction to Records, above, some of the myriad responsibilities of a law enforcement agency records section were described. The majority of these functions are performed by CPD Records. Records staff are cross-trained in all of the assigned responsibilities. Records has periodic rotations in place to ensure skills and knowledge are maintained, which also deters complacency.

As the functions performed by law enforcement records sections vary greatly from agency to agency, there is no universally accepted formula for establishing a department's staffing level. Therefore, CPSM draws upon our experience in both leading law enforcement agencies and our work across the nation in conducting studies such as this to assess staffing levels.

CPD has grown in sworn staffing over the last 20 years by 25 positions. This is an increase of 21.8 percent in overall sworn staffing and a 15 percent increase in patrol staffing. CPD staff have an expectation that an additional eight sworn staff will be added in the coming budget year. During this same period, CPD management indicates the only Records staff change has been

the reduction noted above. However, Records does also anticipate two positions will be requested in the coming budget year.

As workload data is examined, staffing levels will be reviewed and recommendations made regarding staffing adjustments as warranted. These recommendations will be reflected in a Staffing Summary section that follows our workload assessment.

Work Schedules/Public Access Hours

The public counter is open Monday through Friday from 8:00 a.m. to 5:00 p.m. Staff work a 4/10 schedule with some employees off Mondays and some Fridays. Records staff is available Monday through Friday, 6:00 a.m. to 5:00 p.m. The manager works a 9/80 schedule with alternating Fridays off.

Workload Demand

Over the last three years, although not inclusive of all work performed, CPD Records processed an average of 8,744 police reports, 1,993 arrests, 545 Coplogic reports (online public reporting), and 80 subpoenas.

Completed patrol officer reports are submitted through NETRMS where they remain in a queue for a patrol sergeant to review and approve. Once approved, the report is available for Records to process. Supplemental documents not submitted through NETRMS are hand-carried to Records and scanned into NETRMS by assigned staff. This required scanning has increased staff workload. Upon completion of individual case review by Records, reports become available to Investigations for assignment, delivery to court, or other processing. Records regularly suffers a workload backlog following the weekend due to no staff being scheduled over the weekend, plus a light staff on Fridays. This staffing model causes a backlog of report processing and other Records workload.

Report processing is also impacted by the timely completion of police reports by patrol personnel. Policy 344.1.2 outlines report completion requirements specifying supervisory approval for the deferral of reports and a documented tracking of such deferral approvals. Documentation of such an approval or the tracking of a deferral is not practiced per policy to ensure reports are completed, approved, and processed to Records. Records does audit issued report numbers a few times each month. Staff send requests to officers to complete reports, but patrol supervisors are not part of this effort; consequently, these requests are not always acted on promptly. A lack of patrol supervisory oversight, specifically during extended-shift report writing, contributes to this issue, which is most problematic when this occurs with in-custody reports. Records is frequently required to locate and process arrest reports for court submission due to unapproved deferrals. The report deferral policy must be followed and communication improved between Records and patrol supervisors to address this issue.

The secondary workload issue for Records staff is the processing of tasks such as entering warning and municipal code citations. These low-priority tasks are addressed as staff availability allows, but addressing them through operational and staffing adjustments to be discussed here regarding public counter and phone activity may effect this backlog. Due to staff workload, Records utilizes a senior volunteer to complete most of the required general document purging. CPD has recently deployed E-ticket technology, which should positively impact Records workload demand with a reduction in processing time. The requirement that the E-tickets be cut to a particular size by Records staff as requested by the Court should be reviewed as a seemingly unnecessary task. Records expends minimal overtime to address workload, but this is due to job-share and part-time employees working additional shifts. Records could not provide

an accurate accounting of these extra shifts as there is only straight time recorded for these employees.

Daily, one Records staff member is assigned to handle public counter activity not only related to Records, but any other general inquiries or requests for assistance, and answering the department's general phone line. The public window is currently within the Records office, but with the planned office remodel the window will not be within the office. Consideration should be given to assigning a Community Service Officer position to this assignment to address department inquiries, thus relieving the Records staff member to handle records-related workload.

The Records manager's workload is frequently backlogged by reviewing report dispositions and making corrections, the completion of monthly stats, completing PRA requests (see below), and processing detention certificates. The manager indicated there are approximately 1,500 detention certificates awaiting processing by her. The manager raised concern regarding litigation for failure to complete processing in a timely manner. Purging of items such as PRAs, subpoenas, and citations are out of compliance also, as this task falls to the manager due to staffing issues. The dual role managing Records and P/E, and the manager's individual workload, contribute to the manager's inability to exercise the appropriate level of management and quality control over either unit.

CPD management identified a few areas with potential for Records workload impact in the CPSM assessment scope of work. These include the transition from UCR reporting to NIBRS reporting and its increase in report review time. The Records manager said it is anticipated the transition will have minimal impact on staff workload as a county-wide working group is working on NIBRS issues as they arise, thus providing solutions to the concerned agencies and participating departments. Patrol sergeants will be responsible for ensuring proper NIBRS coding while Records will audit the information periodically. It is unknown when CPD will begin the transition to NIBRS. Responsibility for body-worn camera (BWC) video requests and redactions are delegated to the requesting party such as Professional Standards, District Attorney, or City Attorney. The Records manager does the necessary BWC research and burns copies for the City Attorney and Risk Management, primarily for DUI subpoenas. The manager also does research for the District Attorney when that staff cannot locate video in the BWC system.

Public Records Requests
A routine function of any police department records section is the release of public records to include police reports. The Records manager prepares all of the department public records act (PRA) responses. Due to short legal timelines on PRAs, immediate attention is required to meet the deadline for the City Attorney, requiring the manager to put other workload aside to address these requests.

Over the last few years, agencies have hurried to deploy body cameras without the policy preparation or the resources required to store and manage the cameras' recordings. Significant increases in staff time to review, redact, and process recordings for judicial discovery and public records requests (PRA) seeking access to the camera recordings have overwhelmed agencies. Though CPD contracts out redaction services and storage processes have improved, Records staff must address any questions or errors that occur. The CPD Records Division, along with other units including Dispatch, Property and Evidence, Patrol, and Administration, have become burdened with elements of this task and other matters requested through the "discovery" and PRA process.

This added and sometimes complex workload has negatively disrupted primary duties in each of the units identified. As well, parceling out the responsibility for producing such records lends itself

to omission errors that can compromise legal proceedings and public trust in the agency. The establishment of a "Discovery Unit" within Records, with appropriate staffing, should be considered to centralize the tasks required for completion of these responses. Recently, California Senate Bill 1421 and Assembly Bill 748, substantially expanded public access to police records. These new laws will undoubtedly place an increased burden on the department in responding to public record and discovery requests. Initial release of records under SB 1421 was provided by City Attorney, but as additional cases are added, redaction, review and submission will fall to the Records staff. Additional staffing will be required to meet this demand.

Records Staffing Summary

In examining staffing and workload demands, it is clear the authorized staffing level for Records should be increased.

Since the one Records FTE transferred to P/E three years ago is providing daily assistance to Records, it is recommended that an additional FTE be funded and assigned to Records. This allows the current P/E FTE to concentrate on P/E responsibilities on a full-time basis.

Consideration should be given to assigning a Community Service Officer position to the public counter to address department inquiries, thus relieving the currently assigned Records staff member to handle records-related workload.

The establishment of a "Discovery Unit" within Records to centralize the tasks required for completion of judicial and PRA requests is recommended. Initial staffing should be one civilian FTE. This staffing level assumes this unit undertakes the workload presently spread through the department.

As Property and Evidence (P/E) was not part of the current assessment, CPSM cannot speak specifically to its operational efficiency. However, CPSM recommends a Records supervisor position be assigned to Records to lessen the manager's workload, providing the manager the opportunity to carry out appropriate management oversight of both units, and move to ensure P/E does not face any of the potential pitfalls noted in the 2014 report.

FBI UCR Reporting

Virtually all law enforcement agencies provide statistical data to the FBI on crime rates and clearances, among many other facets. Until recently, under UCR criteria, an incident of crime is reported as a single crime, even in the event of multiple offenses within that one incident. The reported offense is for that charge which is the most serious of the crimes from that single incident. For instance, an armed robbery that included an aggravated assault is reported as one incident, an armed robbery.

The FBI is now transitioning to the National Incident-Based Reporting System (NIBRS), with a goal of nationwide implementation in 2021. Implemented to improve the overall quality of crime data collected by law enforcement, NIBRS captures details on each single crime incident—as well as on separate offenses within the same incident—including information on victims, known offenders, relationships between victims and offenders, arrestees, and property involved in crimes. Unlike data reported through the UCR Program's traditional Summary Reporting System (SRS)—an aggregate monthly tally of crimes—NIBRS goes much deeper because of its ability to provide circumstances and context for crimes like location, time of day, and whether the incident was cleared. The vision for NIBRS is for it to become the law enforcement community's standard for quantifying crime, which will help law enforcement and communities around the country use resources more strategically and effectively. This will further support the mission of the FBI's UCR Program to generate reliable information for use in law enforcement

administration, operation, and management. According to Records staff, the transition to NIBRS has been seamless for the most part due to it interface with NETRMS and has not impacted workload demand.

In the Carlsbad Police Department, the responsibility for reporting crime rates rests with the Records Section. While this would seem to be a simple, straightforward task, it is anything but. To ensure consistency in reporting, the FBI has issued strict and detailed guidelines regarding classification and crime clearance criteria (coding). Among the important aspects of such reporting is to enable the reporting agency to effectively measure its crimefighting and solvability rates against other communities. This is not to be used to grade an agency against any other agency, but rather, to be used as a tool to better identify crimefighting strategies and measure the effectiveness of the department and its investigators in solving crime. Should the department have low solvability (clearance) rates, or extraordinarily high rates, examination of the reasons should be undertaken. It may suggest a performance anomaly, or, it may stem from improper coding.

While preventing crime is of utmost importance to law enforcement agencies, solving crime should also have parity. The solving of crimes, which results in the prosecution of offenders, not only prevents future crime, it also provides much-needed closure to crime victims. Clearance rates, as defined and measured by the FBI, are the benchmark for a department's effectiveness in solving crime.

The FBI establishes a three-pronged rule, each of which must be met to clear a case. For FBI reporting purposes, a crime is considered cleared when: (1) a law enforcement agency has arrested the offender; (2) the offender has been charged with the offense; AND (3) the offender is turned over to the court for prosecution (whether following arrest, court summons, or police notice). The arrest of one person may clear several crimes or the arrest of several persons may clear only one crime.

In certain situations, elements beyond law enforcement's control prevent the agency from arresting and formally charging the offender. Examples include the death of an offender or the lack of an extradition treaty with a foreign government in a nation to which the offender has fled. When this occurs, the agency can clear the offense exceptionally. Law enforcement agencies must meet the following four conditions in order to clear an offense by exceptional means: The agency must have identified the offender; gathered enough evidence to support an arrest, make a charge, and turn over the offender to the court for prosecution; identified the offender's exact location so that the suspect could be taken into custody immediately; or encountered a circumstance outside the control of law enforcement that prohibits the agency from arresting, charging, and prosecuting the offender

CPSM discussed reporting practices with Records staff (coding) and found there to be an understanding of the clearance criteria established by the FBI UCR. A review of CPD clearance rates showed a consistency with California and national clearance rates (see Table 6-11). CPSM recommends frequent training be provided to appropriate staff to ensure the correct criteria is adhered to in reporting of crime and clearances. Based upon the complexity of coding criteria, coding should be the responsibility of a limited number of staff, not to exceed two.

TABLE 6-11: Reported Carlsbad, California, and National Crime 2017 Clearance Rates

Crime	Carlsbad			California			National		
	Crimes	Clearances	Rate	Crimes	Clearances	Rate	Crimes	Clearances*	Rate
Murder/Mansltr.	0	0	NA	1,829	1,144	63%	15,657	9,645	62%
Rape	30	6	20%	14,724	5,427	37%	121,084	41,774	35%
Robbery	46	17	37%	56,609	17,324	31%	293,160	87,069	30%
Agg. Assault	171	96	56%	105,391	56,227	53%	747,731	398,541	53%
Burglary	432	38	9%	176,638	18,871	11%	1,281,083	172,946	14%
Larceny	1,638	157	10%	641,804	69,636	11%	5,072,970	974,010	19%
Vehicle Theft	139	21	15%	168,327	15,336	9%	720,346	98,687	14%

*__Note:__ Clearances were calculated from crimes and rate, as these numbers are not directly available from FBI.

Telephone Services

The department's primary business line, 760/931-2100, is answered by Records during business hours and by Communications after hours. As was reported in the Communications section of this report, Records indicates a significant number of telephone calls received require transfer to other department personnel or units. Carlsbad does not track the number of calls received or transferred by Records; however, staff reported that transfer of in-coming telephone calls is routine.

CPSM recommends here, as in Communications, that CPD should ensure all personnel are required to reflect their department cell phone number on their business cards, and that each officer be required to regularly review and respond to phone messages. This adjustments should aid in reducing the number of transfer calls through Records, thus easing the overall workload.

Payment Options

An area of concern noted was the handling of cash. Depending upon the service sought, whether for the collection of fines, vehicle release payments, purchase of report copies, etc., customers can pay with money orders, business checks, credit cards, debit cards, or cash. These transactions are conducted by the Records staff member in the CPD lobby. There is no audit process in place for this financial activity by CPD management.

Cash transactions present an unnecessary risk to the city and the department. As just one of many examples, a few years ago, a records manager at a municipal police department in suburban Los Angeles pled guilty to grand theft. She was charged with stealing monies collected in the course of her duties over a period of many years. Though she agreed to reimburse the city $140,000, department estimates placed the loss at more than $340,000. These were cash transactions for those of the same nature that take place in Carlsbad.

Over the period of 2016 through 2018, the Records Section took in approximately $58,335 in cash payments. CPSM by no means infers that any suspicious activity has occurred at the Carlsbad Police Department. To the contrary, the system in place serves to minimize the risk. However, CPSM does maintain that the present system presents an unnecessary risk to the city, CPD, and its staff, and should be revised to eliminate the acceptance of cash.

Records Recommendations:

- The department should consider developing a section within the policy manual specific to the Records function. (Recommendation No. 35.)

- Records should also develop a procedural manual for staff reference, improved consistency, and guidelines for new employees. (Recommendation No. 36.)

- The report deferral policy must be followed and communication improved between Records and patrol supervisors to address this issue. (Recommendation No. 37.)

- The requirement that the E-tickets be cut to a particular size by Records staff as requested by the Court should be reviewed as a seemingly unnecessary task. (Recommendation No. 38.)

- Consideration should be given to assigning a Community Service Officer position to the public counter to address department inquiries. (Recommendation No. 39.)

- An additional FTE should be funded and assigned to Records to allow the current P/E FTE to concentrate on P/E responsibilities on a full-time basis. (Recommendation No. 40.)

- For the establishment of a "Discovery Unit" within Records to centralize the tasks required for completion of judicial and PRA requests, the recommended initial staffing should be not less than 1.0 civilian FTEs. This staffing level assumes this unit will undertake the workload presently spread through the department. (Recommendation No. 41.)

- CPSM recommends a Records supervisor position be assigned to Records to lessen the manager's workload to allow for appropriate management oversight. (Recommendation No. 42.)

- CPSM recommends frequent training be provided to appropriate staff to ensure the correct criteria is adhered to in reporting of UCR crime and clearances. (Recommendation No. 43.)

- CPSM recommends here, as in Communications, that CPD should ensure all personnel are required to reflect their department cell phone number on their business cards, and that each officer be required to regularly review and respond to phone messages. (Recommendation No. 44.)

- CPSM recommends the CPD eliminate the acceptance of cash at its public window as a payment option for department services or records. (Recommendation No. 45.)

TECHNOLOGY

In 2014, CPD was found to be one of the least technologically sophisticated departments that CPSM has evaluated. At the time of the report, the city was in the process of establishing a five-year strategic IT plan. CPD has made great strides in acquiring and implementing technological resources throughout the department since the last report.

Technology support for CPD is provided by city IT staff who are embedded with the police department. The staff consists of a manager, two analysts, a technician, and a network administrator who provide direct support of department hardware and software systems. The IT team has had a significant role in the department's technology improvements. Concerned department members and IT staff work together to ensure technologies to be deployed address the needs of all levels including the end-user.

Systems implemented in recent years include:

- NETRMS records management system.
- Body-worn cameras, including enhancements in redaction software.
- Individual officer assigned laptops.
- Mobile command post with communication and technology enhancements.

Systems and improvements to be implemented soon are:

- E-cite technology.
- Dispatch software update with analytics module and improved GIS.
- New 9-1-1 system to include text 9-1-1 capability.
- Radio system upgrade.
- Drone technology for SWAT and operational needs.

Added and/or enhanced technology and its impact on workload is challenging to quantify. Technology is generally intended to provide operational efficiency and in turn reduce workload. However, many times added technology means another process to employ, piece of equipment to handle, system to access, screen to view, information to process, or another unintended consequence. The learning curve can create an initial workload which dissipates as user expertise grows.

As noted in the Communications section of this report, technology resources utilized and/or accessed by Communications have also been enhanced in recent years. PSAP centers across the country are dealing with this same issue. In discussions with Communications management it was indicated this trend has not yet reached a level that requires additional staff within CPD. It is feasible in the not-too-distant future that a "technology" desk may become an industry-wide component of communications center staffing, similar to primary dispatcher, backup dispatcher, and call taker positions are today. Any future staffing evaluation should also include a technology assessment to ensure only truly beneficial systems are deployed in communications centers.

No recommendations are offered.

SECTION 7. STAFFING RECOMMENDATION SUMMARY

Throughout this report we have identified areas where additional staffing should be considered. Those recommendations are included in section-specific reporting. Here, we provide a summary of those recommendations.

We believe that each of the recommended positions offer significant added value to the city. While we understand that costs associated with the recommendations may be considerable, our objective is to identify staffing needs based upon workload demand and best practices, and we do so without constraint based upon fiscal realities. It is the responsibility of the city to determine if any, or all, of these recommendations are feasible.

Operations Bureau Recommended Staffing Increases

Patrol
- Four sergeant FTEs, one for each primary patrol team.
- Create a PSO classification and staff with four FTEs. Two of those would be new positions and two would be upgraded CSOs.
- Increase minimum staffing as outlined.

CSO
- If the decision is made to not establish a PSO classification as described, increase CSO staffing by two FTEs.

Traffic
- Three motor officers (with added workload responsibilities).

Support Bureau Recommended Staffing Increases

Investigations
- Two investigator FTEs.

Homeless Outreach Team
- One police officer FTE.
- Three LCSW FTEs (Increase of one LCSW with redirected assignment for the two existing).
- One sergeant FTE.

Records
- One Community Service Officer FTE.
- Two records specialist FTEs.
- One Records supervisor FTE.

SECTION 8. DATA ANALYSIS

This data analysis on police patrol operations for the Carlsbad Police Department focuses on three main areas: workload, deployment, and response times. These three areas are related almost exclusively to patrol operations, which constitute a significant portion of the police department's personnel and financial commitment.

All information in this analysis was developed using data from the department's computer-aided dispatch (CAD) system.

CPSM collected data for a one-year period of January 1, 2018, through December 31, 2018. The majority of the first section of the report, concluding with Table 8-8, uses call data for the one-year period. For the detailed workload analysis, we use two eight-week sample periods. The first period is from January 4 through February 28, 2018, or winter, and the second period is from July 7 through August 31, 2018, or summer.

WORKLOAD ANALYSIS

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

- We first process the data to improve accuracy. For example, we remove duplicate patrol units recorded on a single event as well as records that do not indicate an actual activity. We also remove incomplete data, as found in situations where there is not enough time information to evaluate the record.
- At this point, we have a series of records that we call "events." We identify these events in three ways:
  - □ We distinguish between patrol and nonpatrol units.
  - □ We assign a category to each event based upon its description.
  - □ We indicate whether the call is "zero time on scene" (i.e., patrol units spent less than 30 seconds on scene), "police-initiated," or "community-initiated."
- We then remove all records that do not involve a patrol unit to get a total number of patrol-related events.
  - □ The patrol force includes patrol officers, sergeants, bike patrol, extra units, K9, traffic DUI, and reserve units.
  - □ Traffic accident investigators, motor units, and community service officers are analyzed separately.
  - □ All other personnel, e.g. investigations, crime suppression, school resource officers, volunteers, etc., are not analyzed in the data analysis report.
- At important points during our analysis, we focus on a smaller group of events designed to represent actual calls for service. This excludes events with no officer time spent on scene and directed patrol activities.

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

As with similar cases around the country, we encountered a number of issues when analyzing Carlsbad's dispatch data. We made assumptions and decisions to address these issues.

- 749 events (about 1.5 percent) involved patrol units spending zero time on scene.

- 5 calls lacked accurate busy times. We excluded these calls when evaluating busy times and work hours.

- The computer-aided dispatch (CAD) system used approximately 228 different event descriptions, which we condensed into 16 categories for our tables and 13 categories for our figures (shown in Chart 8-1). Table 8-26 in the appendix shows how each call description was categorized.

Between January 1, 2018, and December 31, 2018, the communications center recorded approximately 51,600 events that were assigned call numbers, and which included an adequate record of a responding patrol unit as either the primary or secondary unit. When measured daily, the department reported an average of 141 patrol-related events per day, approximately 1.5 percent of which (2.1 per day) had fewer than 30 seconds spent on the call.

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

CHART 8-1: Event Descriptions for Tables and Figures

Table Category	Figure Category
911 hang up	911 hang up
Alarm	Alarm
Assist other agency	Assist
Check	Check
Crime–person	Crime
Crime–property	
Directed patrol	Directed patrol
Disturbance	Disturbance
Animal	General noncriminal
Miscellaneous	
Investigation	Investigation
Out of service–administrative	Out of service
Public contact	Public contact
Suspicious incident	Suspicious incident
Accident	Traffic
Traffic enforcement	

FIGURE 8-1: Percentage Events per Day, by Initiator
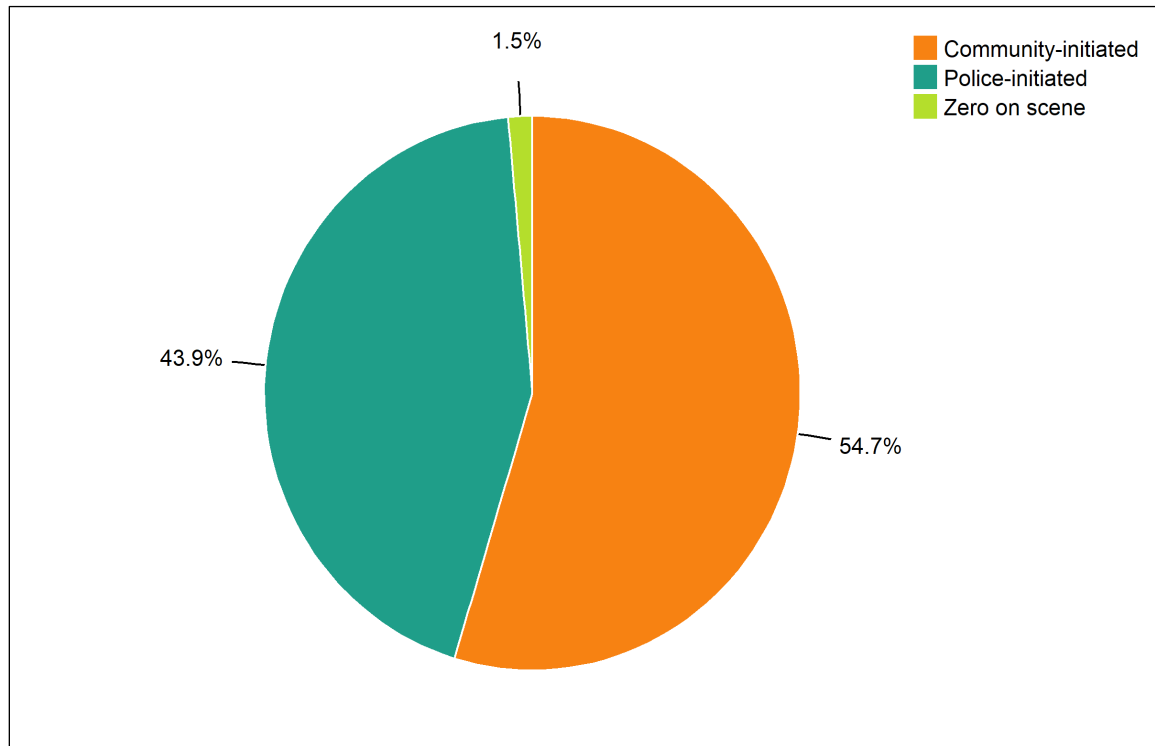
Note: Percentages are based on a total of 51,623 events.

TABLE 8-1: Events per Day, by Initiator

Initiator	No. of Events	Events per Day
Community-initiated	28,235	77.4
Police-initiated	22,639	62.0
Zero on scene	749	2.1
Total	**51,623**	**141.4**

Observations:

- 55 percent of all events were community-initiated.

- 44 percent of all events were police-initiated.

- 1 percent of the events had zero time on scene.

- On average, there were 141 events per day, or 5.9 per hour.

FIGURE 8-2: Percentage Events per Day, by Category
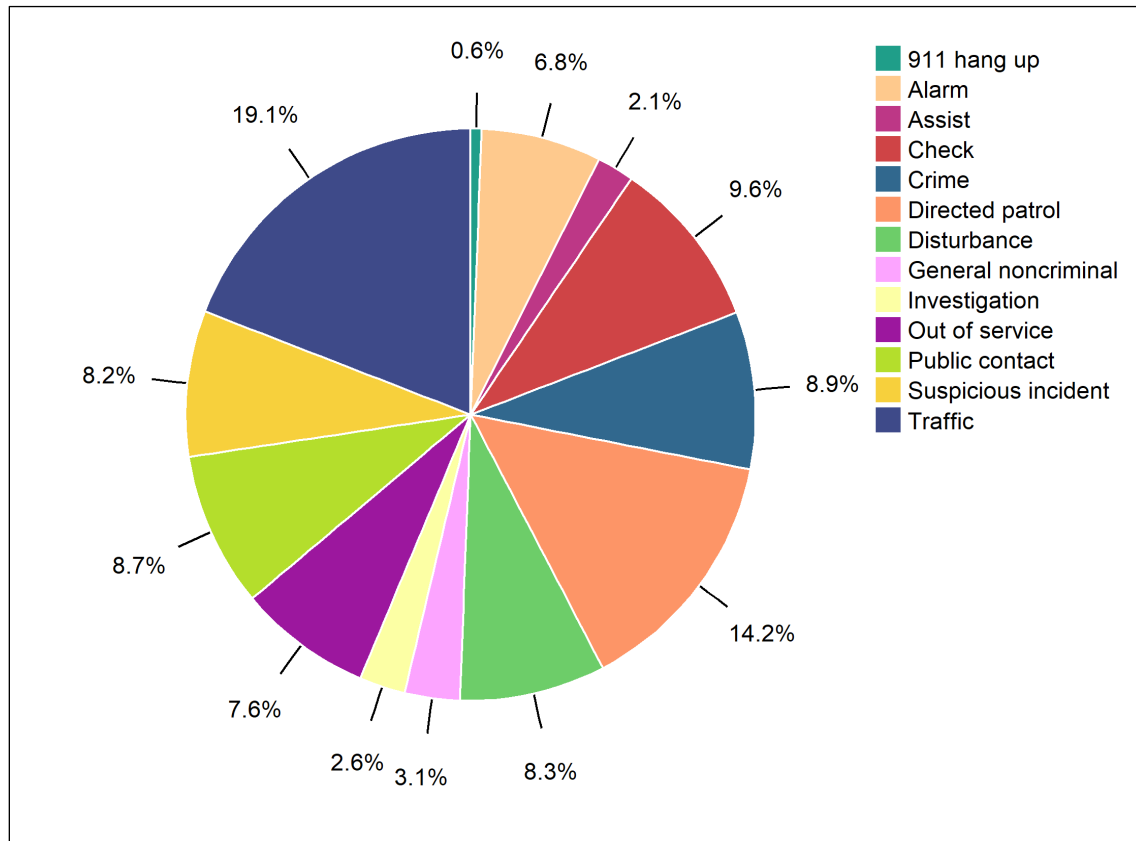
Pie chart with the following values and legend:

Category	Percentage
911 hang up	0.6%
Alarm	6.8%
Assist	2.1%
Check	9.6%
Crime	8.9%
Directed patrol	14.2%
Disturbance	8.3%
General noncriminal	3.1%
Investigation	2.6%
Out of service	7.6%
Public contact	8.7%
Suspicious incident	8.2%
Traffic	19.1%

Note: The figure combines categories in the following table according to the description in Chart 8-1.

TABLE 8-2: Events per Day, by Category

Category	No. of Events	Events per Day
911 hang up	322	0.9
Accident	1,300	3.6
Alarm	3,517	9.6
Animal	174	0.5
Assist other agency	1,087	3.0
Check	4,975	13.6
Crime–person	1,535	4.2
Crime–property	3,054	8.4
Directed patrol	7,353	20.1
Disturbance	4,276	11.7
Investigation	1,344	3.7
Miscellaneous	1,442	4.0
Out of service–administrative	3,905	10.7
Public contact	4,511	12.4
Suspicious incident	4,253	11.7
Traffic enforcement	8,575	23.5
Total	**51,623**	**141.4**

Note: Observations below refer to events shown within the figure rather than the table.

Observations:

- The top four categories accounted for 52 percent of events:
    - 19 percent of events were traffic-related.
    - 14 percent of events were directed patrol events.
    - 10 percent of events were checks.
    - 9 percent of events were crimes.

FIGURE 8-3: Percentage Calls per Day, by Category

Note: The figure combines categories in the following table according to the description in Chart 8-1.

TABLE 8-3: Calls per Day, by Category

Category	No. of Calls	Calls per Day
911 hang up	317	0.9
Accident	1,296	3.6
Alarm	3,481	9.5
Animal	172	0.5
Assist other agency	1,065	2.9
Check	4,914	13.5
Crime–person	1,529	4.2
Crime–property	3,031	8.3
Disturbance	4,210	11.5
Investigation	1,338	3.7
Miscellaneous	1,388	3.8
Public contact	4,452	12.2
Suspicious incident	4,202	11.5
Traffic enforcement	8,455	23.2
Total	**39,850**	**109.2**

Note: The focus here is on recorded calls rather than recorded events. We removed 749 events with zero time on scene, 3,813 out of service, and 7,211 directed patrol activities.

Observations:

- On average, there were 109.2 calls per day, or 4.5 per hour.

- The top four categories accounted for 59 percent of calls:

  - 24 percent of calls were traffic-related.

  - 12 percent of calls were checks.

  - 11 percent of calls were crimes.

  - 11 percent of calls were public contact calls.

FIGURE 8-4: Calls per Day, by Initiator and Month
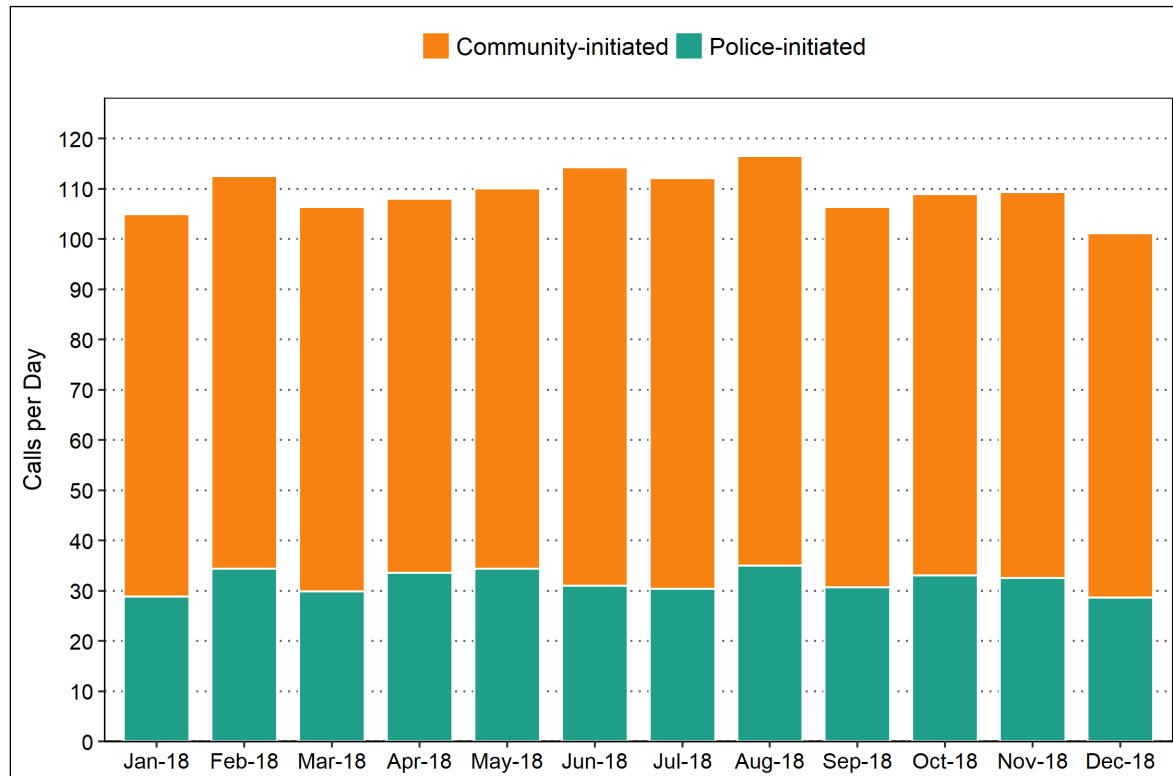
TABLE 8-4: Calls per Day, by Initiator and Months

Initiator	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Community	76.1	78.2	76.5	74.4	75.7	83.3	81.7	81.5	75.7	75.9	76.8	72.6
Police	28.8	34.4	29.9	33.6	34.3	31.0	30.4	35.0	30.6	33.0	32.6	28.6
Total	104.9	112.5	106.4	108.0	110.0	114.3	112.1	116.5	106.4	108.9	109.3	101.2

Observations:

- The number of calls per day was lowest in December.

- The number of calls per day was highest in August.

- The months with the most calls had 15 percent more calls than the months with the fewest calls.

- August had the most police-initiated calls, with 22 percent more than January and December, which had the fewest.

- June had the most community-initiated calls, with 15 percent more than December, which had the fewest.

FIGURE 8-5: Calls per Day, by Category and Month
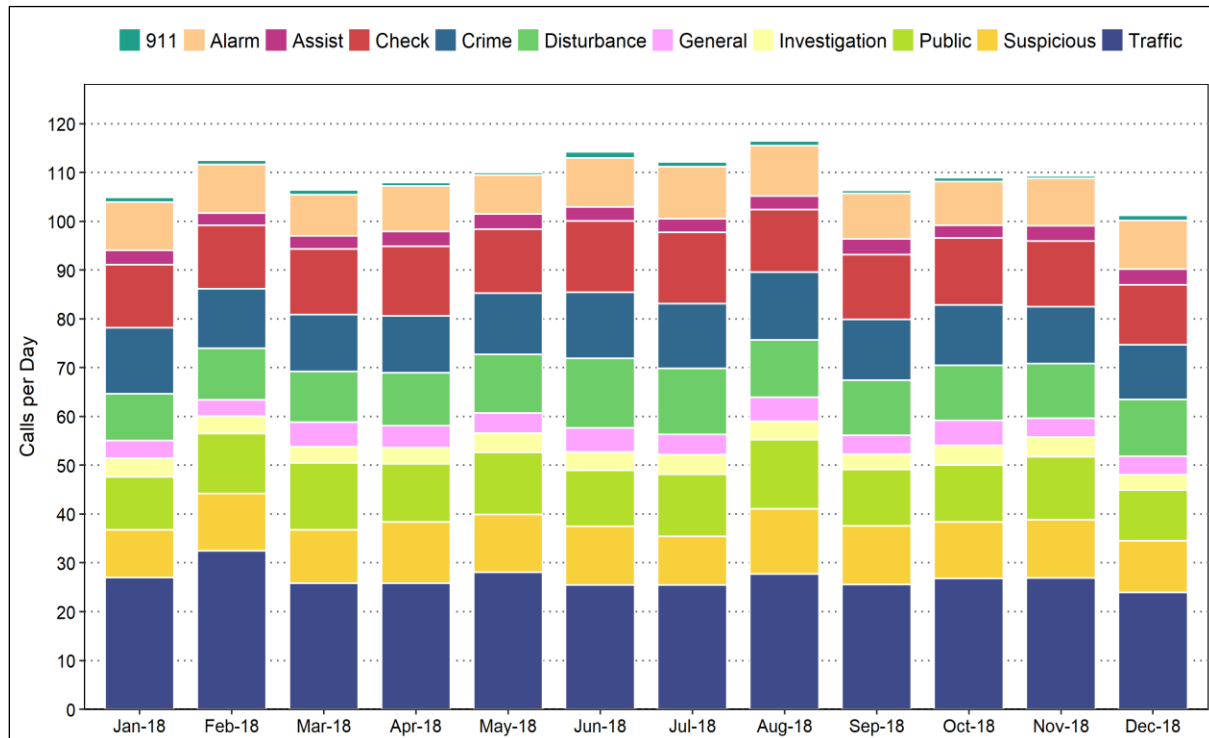
Note: The figure combines categories in the following table according to the description in Chart 8-1.
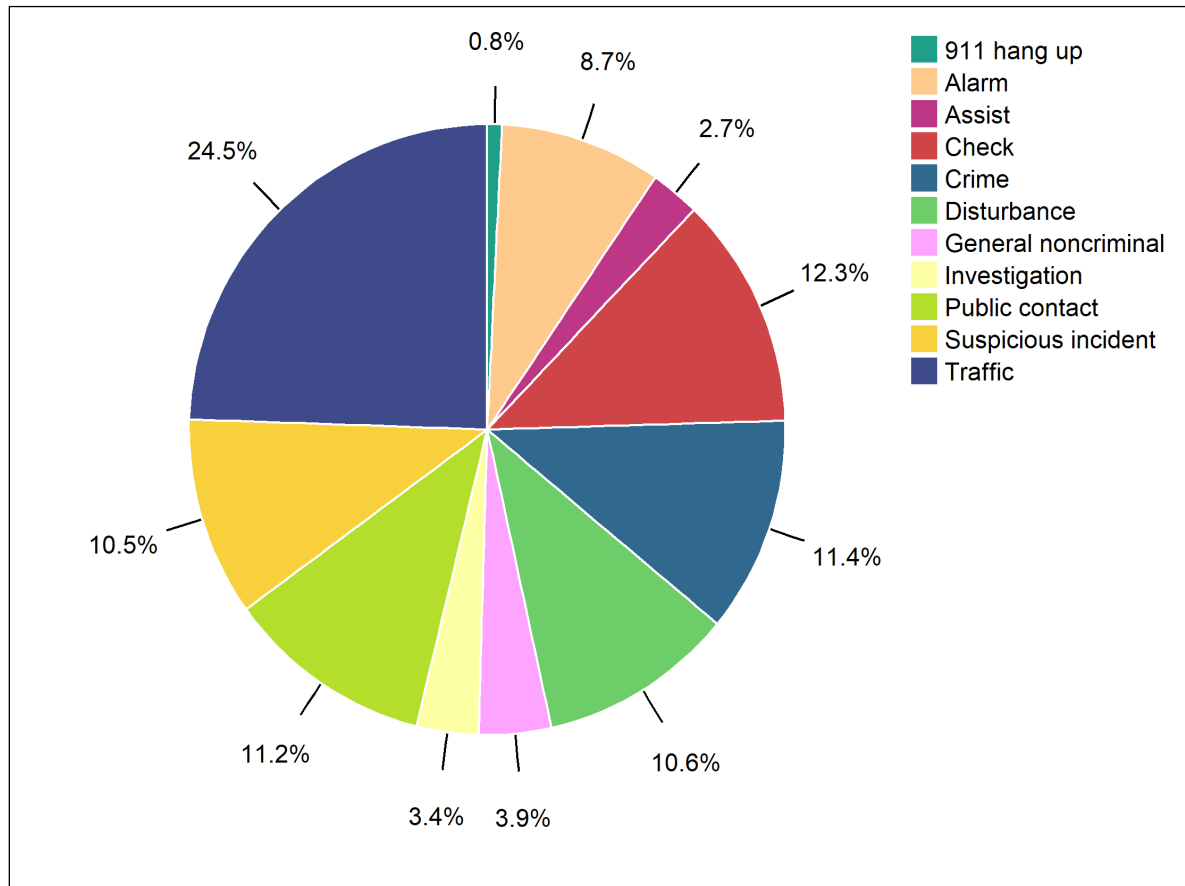
TABLE 8-5: Calls per Day, by Category and Month

Category	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
911 hang up	1.0	0.9	0.9	0.8	0.5	1.3	0.9	1.0	0.7	0.7	0.6	1.0
Accident	3.4	3.9	3.9	3.4	3.8	3.3	3.2	3.9	3.7	3.2	3.0	3.8
Alarm	9.8	10.0	8.5	9.3	8.1	10.1	10.7	10.3	9.3	9.0	9.6	9.9
Animal	0.1	0.3	0.6	0.5	0.3	0.8	0.9	0.6	0.4	0.4	0.3	0.4
Assist other	3.0	2.5	2.7	3.0	3.1	2.8	2.8	2.8	3.2	2.6	3.2	3.2
Check	12.9	13.0	13.5	14.3	13.2	14.6	14.6	12.8	13.3	13.7	13.4	12.4
Crime–person	3.1	3.1	4.6	4.2	4.0	5.1	4.6	4.8	4.3	4.5	4.3	3.5
Crime–property	10.5	9.0	7.0	7.4	8.5	8.5	8.6	9.1	8.2	7.7	7.4	7.6
Disturbance	9.5	10.6	10.5	10.9	11.9	14.2	13.5	11.8	11.3	11.4	11.2	11.6
Investigation	3.9	3.5	3.4	3.3	3.9	3.7	4.0	3.7	3.2	4.1	4.1	3.1
Miscellaneous	3.5	3.1	4.3	4.0	3.8	4.2	3.3	4.3	3.5	4.6	3.5	3.4
Public contact	10.8	12.3	13.7	11.9	12.8	11.5	12.7	14.2	11.5	11.6	12.9	10.4
Suspicious	9.7	11.7	10.9	12.5	11.8	12.0	9.9	13.4	12.0	11.6	12.0	10.6
Traffic	23.6	28.6	21.9	22.4	24.2	22.2	22.3	23.7	21.8	23.7	23.9	20.1
Total	**104.9**	**112.5**	**106.4**	**108.0**	**110.0**	**114.3**	**112.1**	**116.5**	**106.4**	**108.9**	**109.3**	**101.2**

Note: Calculations were limited to calls rather than events.

Observations:

- The top four categories averaged between 57 and 62 percent of calls throughout the year:
  - Traffic-related calls averaged between 23.9 and 32.5 calls per day throughout the year.
  - Checks averaged between 12.4 and 14.6 calls per day throughout the year.
  - Crimes averaged between 11.2 and 13.8 calls per day throughout the year.
  - Public contact calls averaged between 10.4 and 14.2 calls per day throughout the year.
- Crimes accounted for 11 to 13 percent of total calls.

FIGURE 8-6: Primary Unit's Average Occupied Times, by Category and Initiator
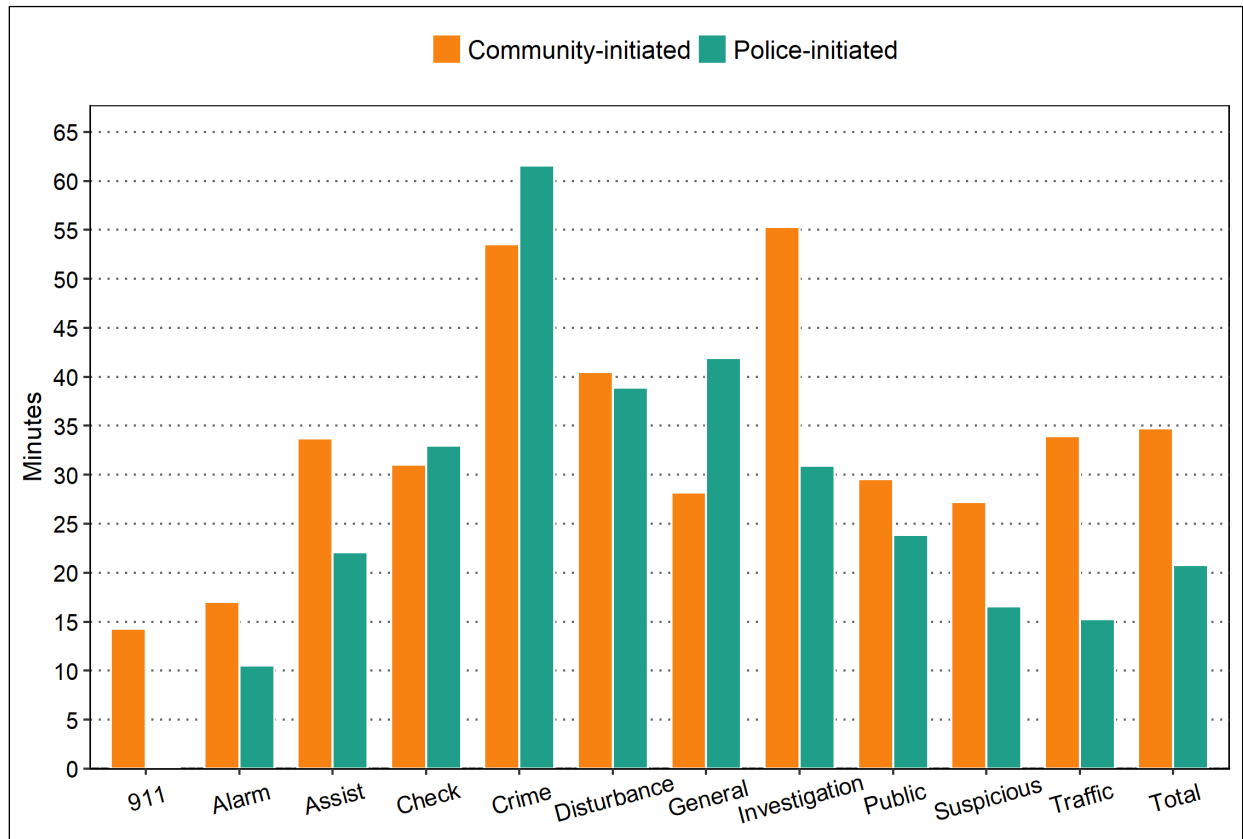
Note: The figure combines categories using weighted averages from the following table according to the description in Chart 8-1. For this graph and the following Table 8-6, we removed five calls with inaccurate busy times.

TABLE 8-6: Primary Unit's Average Occupied Times, by Category and Initiator

Category	Community-Initiated		Police-Initiated	
	Minutes	Calls	Minutes	Calls
911 hang up	14.3	317	NA	0
Accident	50.2	1,190	32.6	106
Alarm	17.0	3,477	10.5	4
Animal	20.6	167	23.1	5
Assist other agency	33.7	985	22.1	80
Check	31.0	3,792	33.0	1,122
Crime–person	67.8	1,454	91.0	74
Crime–property	46.4	2,910	43.6	121
Disturbance	40.5	3,919	38.9	291
Investigation	55.3	1,215	30.9	123
Miscellaneous	29.3	1,123	42.3	264
Public contact	29.5	2,495	23.8	1,955
Suspicious incident	27.2	2,860	16.6	1,341
Traffic enforcement	25.6	2,327	15.0	6,128
Weighted Average/Total Calls	**34.8**	**28,231**	**20.8**	**11,614**

Note: The information in Figure 8-6 and Table 8-6 is limited to calls and excludes all events that show zero time on scene. A unit's occupied time is measured as the time from when the unit is dispatched until the unit becomes available again. The times shown are the average occupied minutes per call for the primary unit, rather than the total occupied minutes for all units assigned to a call. Observations below refer to times shown within the figure rather than the table.

Observations:

- A unit's average time spent on a call ranged from 11 to 62 minutes overall.

- The longest average times were for police-initiated crime calls.

- The average time spent on crime calls was 54 minutes for community-initiated calls and 62 minutes for police-initiated calls.

FIGURE 8-7: Number of Responding Units, by Initiator and Category
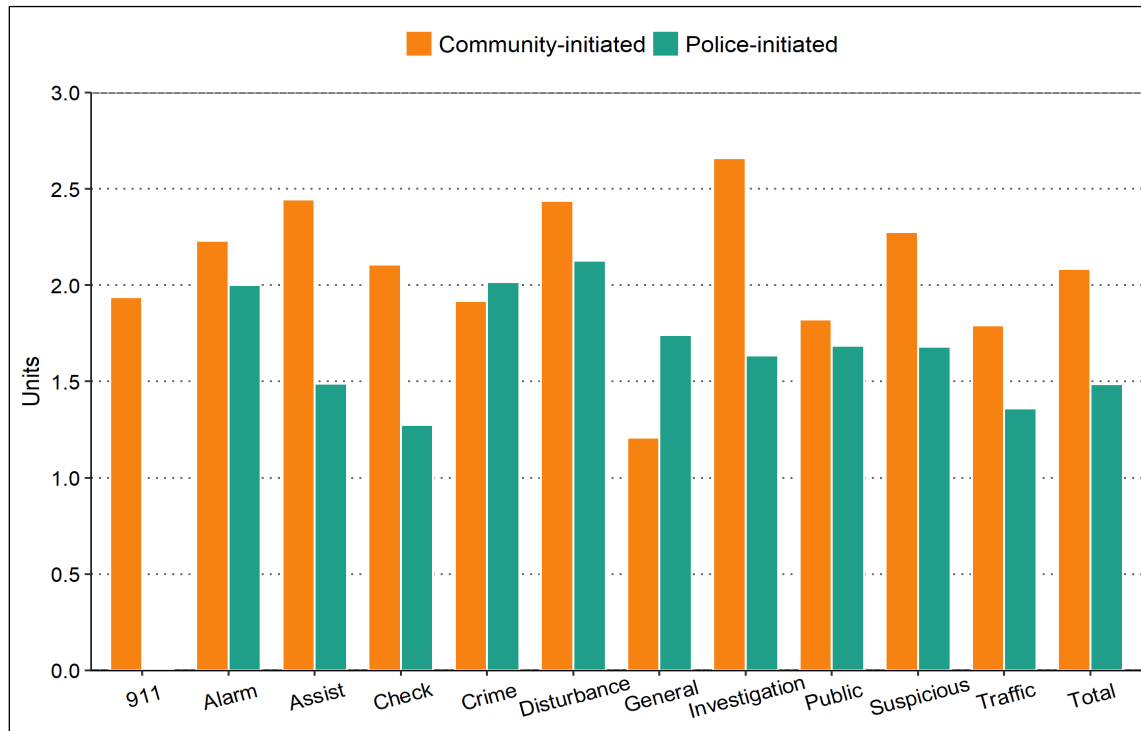
Note: The figure combines categories using weighted averages from the following table according to the description in Chart 8-1.

TABLE 8-7: Average Number of Responding Units, by Initiator and Category

Category	Community-Initiated		Police-Initiated	
	No. of Units	Calls	No. of Units	Calls
911 hang up	1.9	317	NA	0
Accident	2.3	1,190	1.8	106
Alarm	2.2	3,477	2.0	4
Animal	1.4	167	1.2	5
Assist other agency	2.4	985	1.5	80
Check	2.1	3,792	1.3	1,122
Crime–person	2.4	1,454	2.6	75
Crime–property	1.7	2,910	1.7	121
Disturbance	2.4	3,919	2.1	291
Investigation	2.7	1,215	1.6	123
Miscellaneous	1.2	1,124	1.8	264
Public contact	1.8	2,497	1.7	1,955
Suspicious incident	2.3	2,861	1.7	1,341
Traffic enforcement	1.5	2,327	1.4	6,128
Weighted Average/Total Calls	**2.1**	**28,235**	**1.5**	**11,615**

Note: The information in Figure 8-7 and Table 8-7 is limited to calls and excludes all events that show zero time on scene. Observations refer to the number of responding units shown within the figure rather than the table.

FIGURE 8-8: Number of Responding Units, by Category, Community-initiated Calls
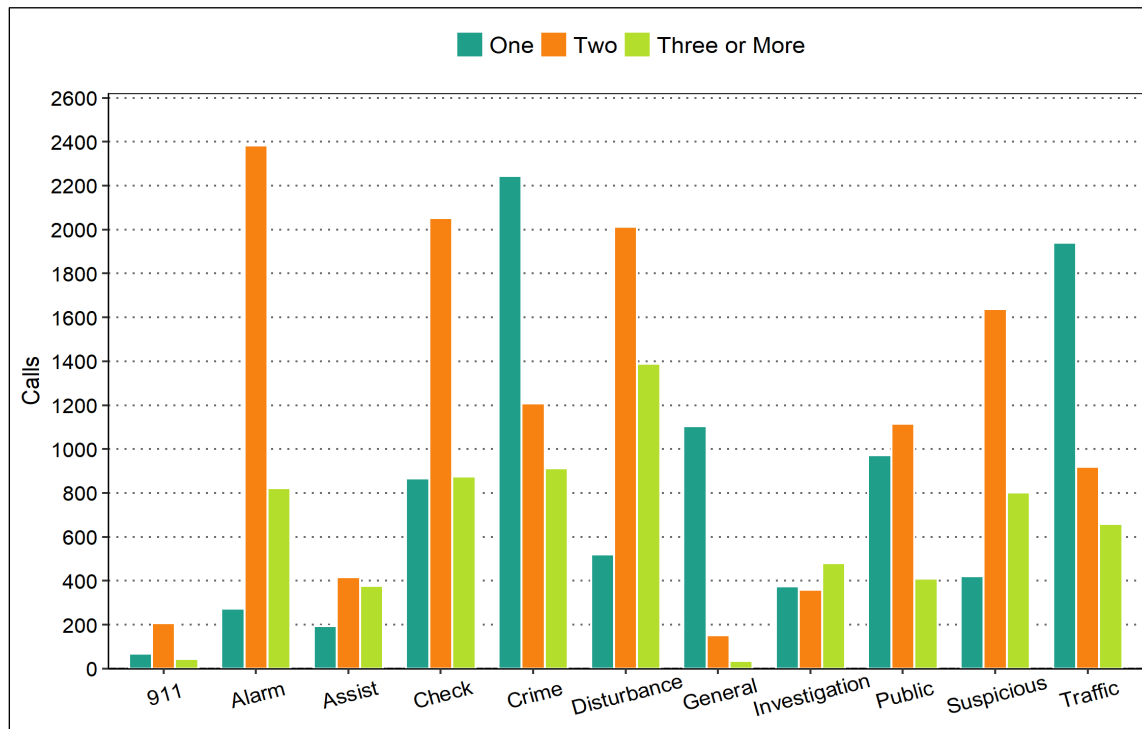
Note: The figure combines categories using weighted averages from the following table according to the description in Chart 8-1.

TABLE 8-8: Number of Responding Units, by Category, Community-initiated Calls

Category	Responding Units		
	One	Two	Three or More
911 hang up	67	207	43
Accident	370	388	432
Alarm	272	2,383	822
Animal	115	46	6
Assist other agency	193	416	376
Check	866	2,052	874
Crime–person	514	423	517
Crime–property	1,730	784	396
Disturbance	519	2,012	1,388
Investigation	375	359	481
Miscellaneous	990	105	29
Public contact	973	1,115	409
Suspicious incident	421	1,637	803
Traffic enforcement	1,569	532	226
Total	**8,974**	**12,459**	**6,802**

Observations:

- The overall mean number of responding units was 2.1 for community-initiated calls and 1.5 for police-initiated calls.

- The mean number of responding units was as high as 2.7 for investigation calls that were community-initiated.

- 32 percent of community-initiated calls involved one responding unit.

- 44 percent of community-initiated calls involved two responding units.

- 24 percent of community-initiated calls involved three or more responding units.

- The largest group of calls with three or more responding units were disturbances.

FIGURE 8-9: Percentage Calls and Work Hours, by Beat
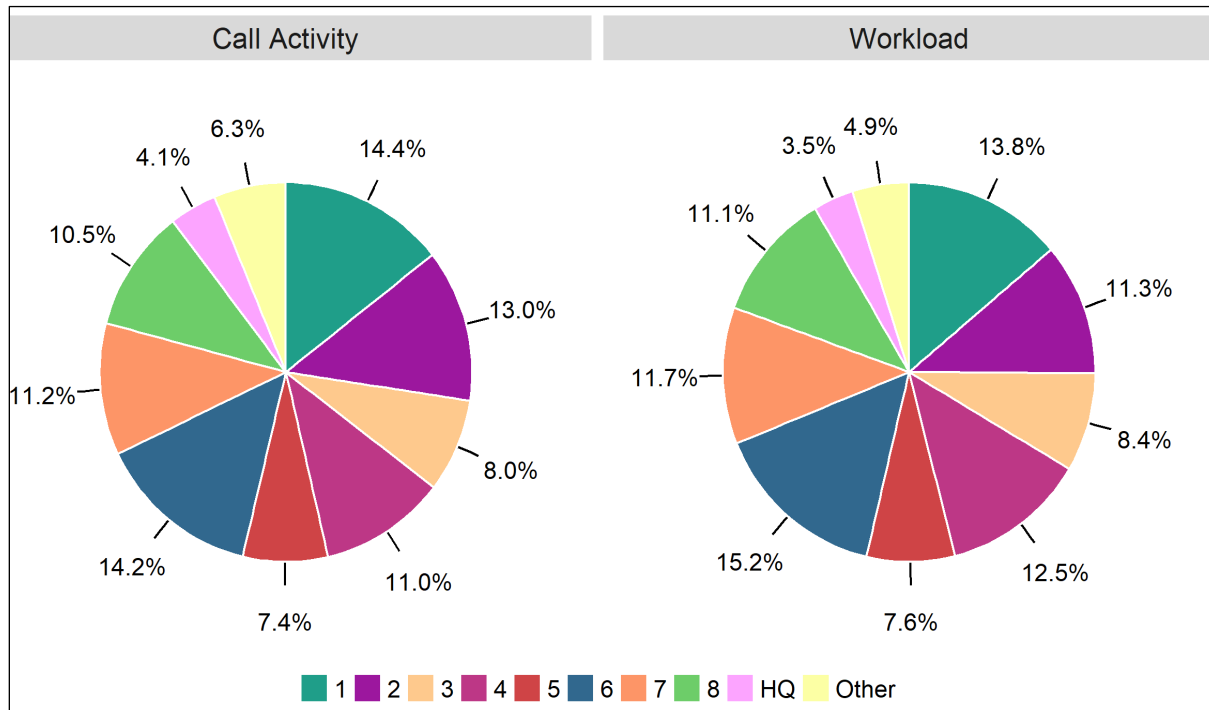
Note: The "other" category includes 2,497 calls with unknown beats and beats "9," "10," and "ES."

TABLE 8-9: Calls and Work Hours by Area, per Day

Beat	Per Day		Area
	Calls	Work Hours	(Sq. Miles)
1	15.7	13.6	1.3
2	14.2	11.1	1.9
3	8.7	8.3	3.3
4	12.0	12.3	4.9
5	8.0	7.5	8.0
6	15.5	15.0	5.1
7	12.3	11.5	8.6
8	11.4	10.9	6.6
HQ	4.5	3.4	NA
Other	6.8	4.9	NA
Total	**109.2**	**98.7**	**42.0**

Observations:

- Beats 1 and 6 had the most calls and workload, together accounting for approximately 29 percent of the calls and workload.

- Excluding calls at police headquarters or other beats, an equal distribution of calls and work would allot 12.2 calls and 11.3 work hours per day per beat.

FIGURE 8-10: Percentage Calls and Work Hours, by Category, Winter 2018

Call Activity	Workload

Call Activity

- 0.9%
- 9.2%
- 2.6%
- 27.3%
- 11.8%
- 11.8%
- 9.9%
- 9.1%
- 10.8%
- 3.5%
- 3.2%

Workload

- 0.5%
- 5.9%
- 3.3%
- 18.3%
- 12.1%
- 9.7%
- 18.4%
- 8.3%
- 13.7%
- 7.2%
- 2.6%

Legend: ■ 911 ■ Alarm ■ Assist ■ Check ■ Crime ■ Disturbance ■ General ■ Investigation ■ Public ■ Suspicious ■ Traffic
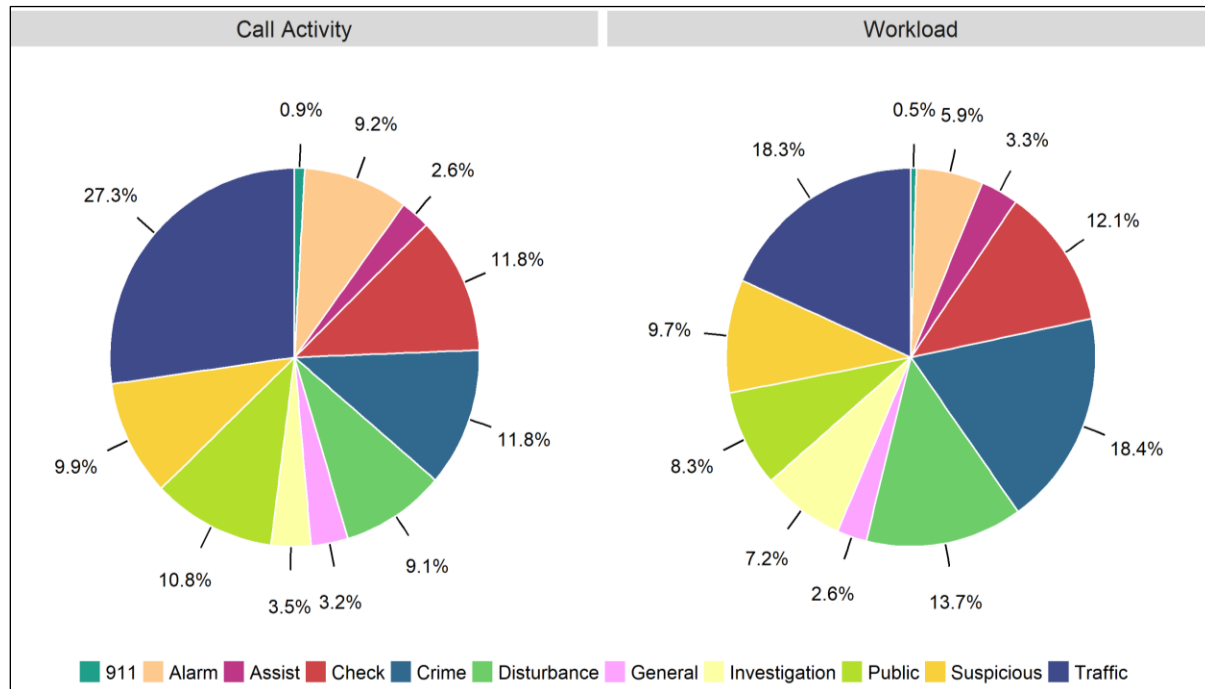
TABLE 8-10: Calls and Work Hours per Day, by Category, Winter 2018

Category	Per Day Calls	Per Day Work
911 hang up	1.0	0.5
Accident	3.7	6.6
Alarm	9.9	5.6
Animal	0.2	0.1
Assist other agency	2.8	3.1
Check	12.8	11.6
Crime–person	3.1	7.0
Crime–property	9.7	10.7
Disturbance	9.9	13.2
Investigation	3.8	6.9
Miscellaneous	3.3	2.4
Public contact	11.7	8.0
Suspicious incident	10.8	9.3
Traffic enforcement	25.8	11.0
Total	**108.4**	**96.0**

Note: Workload calculations focused on calls rather than events.

Observations, Winter:

- Total calls averaged 108 per day, or 4.5 per hour.

- Total workload averaged 96 hours per day, meaning that on average 4.0 officers per hour were busy responding to calls.

- Traffic calls constituted 27 percent of calls and 18 percent of workload.

- Checks constituted 12 percent of calls and 12 percent of workload.

- Crimes constituted 12 percent of calls and 18 percent of workload.

- Public contact calls constituted 11 percent of calls and 8 percent of workload.

- These top four categories constituted 62 percent of calls and 57 percent of workload.

FIGURE 8-11: Percentage Calls and Work Hours, by Category, Summer 2018
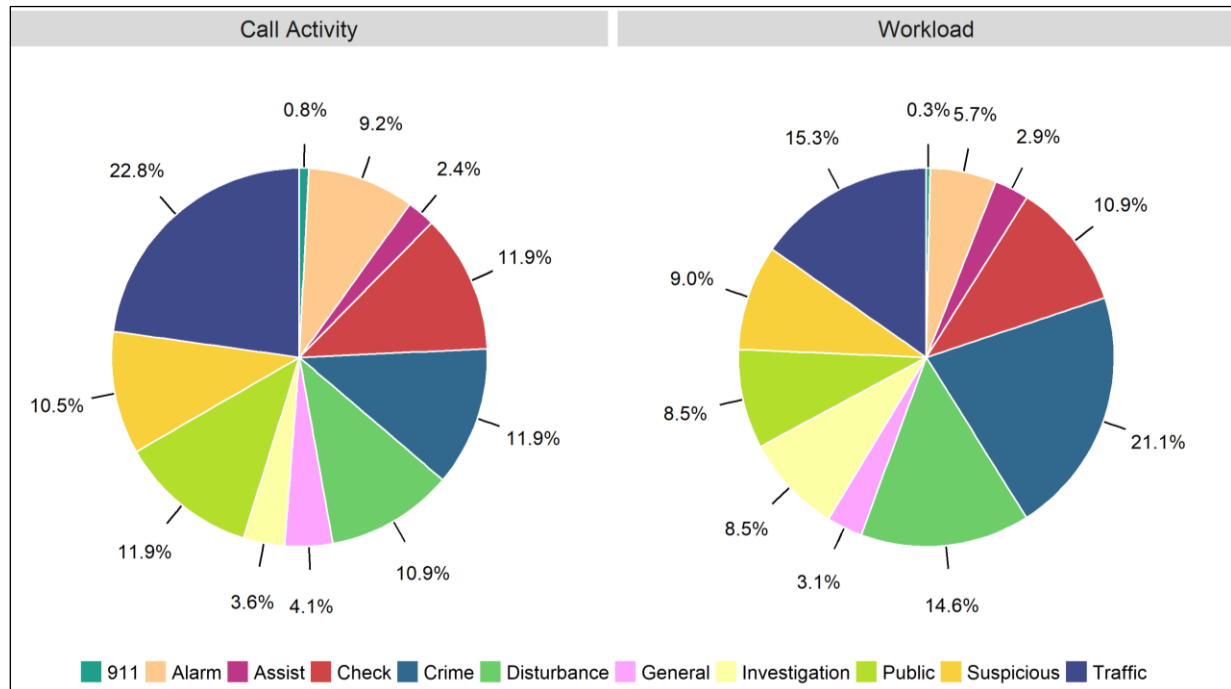
TABLE 8-11: Calls and Work Hours per Day, by Category, Summer 2018

Category	Per Day	
	Calls	Work Hours
911 hang up	0.9	0.3
Accident	3.6	5.6
Alarm	10.4	5.8
Animal	0.7	0.4
Assist other agency	2.8	3.0
Check	13.4	11.1
Crime–person	4.6	10.8
Crime–property	8.9	10.6
Disturbance	12.4	14.8
Investigation	4.0	8.6
Miscellaneous	3.9	2.8
Public contact	13.4	8.6
Suspicious incident	11.9	9.2
Traffic enforcement	22.2	9.9
Total	**113.1**	**101.5**

Note: Workload calculations focused on calls rather than events.

Observations, Summer:

- The average calls per day and daily workload were higher in summer than in winter.

- Total calls averaged 113 per day, or 4.7 per hour.

- Total workload averaged 102 hours per day, meaning that on average 4.2 officers per hour were busy responding to calls.

- Traffic calls constituted 23 percent of calls and 15 percent of workload.

- Checks constituted 12 percent of calls and 11 percent of workload.

- Crimes constituted 12 percent of calls and 21 percent of workload.

- Public contact calls constituted 12 percent of calls and 8 percent of workload.

- These top four categories constituted 58 percent of calls and 56 percent of workload.

OUT-OF-SERVICE ACTIVITIES

In the period from January 1, 2018, through December 31, 2018, the dispatch center recorded out-of-service activities. While some activities were assigned a call number, there were also activities that were not assigned a call number. We combine both types of out-of-service activities and analyze all of them in this section.

We focused on those activities that involved a patrol unit. We also limited our analysis to activities that occurred during shifts where the same patrol unit was also responding to calls for service. Each record only indicates one unit per activity. There were a few problems with the data provided and we made assumptions and decisions to address these issues:

- We excluded activities that lasted less than 30 seconds. These are irrelevant and contribute little to the overall workload.

- Another portion of the recorded activities lasted more than eight hours. As an activity is unlikely to last more than eight hours, we assumed that these records were inaccurate.

- After these exclusions, 19,036 activities remained. These activities had an average duration of 43.8 minutes.

In this section, we report out-of-service activities and workload by type of activity. In the next section, we include these activities in the overall workload when comparing the total workload against available personnel in winter and summer.

TABLE 8-12: Activities and Occupied Times by Description

Description	Occupied Time	Count
At Station	42.1	815
Car Wash	14.2	954
City Yard	25.2	68
Court	122.6	57
Enroute Out of Service	16.9	261
Meeting	57.8	500
Office Routine	70.5	1,790
Officer Training	68.0	1,572
Out of Car	21.7	2,191
Out of Service	39.3	438
Range	90.5	31
Reports	41.9	8,130
Administrative - Weighted Average/Total Activities	**43.5**	**16,807**
Meal Break	46.3	2,229
Weighted Average/Total Activities	**43.8**	**19,036**

Observations:

- The most common administrative activity status was "reports."

- Meal breaks were the only recorded personal activity.

- The longest average occupied time was for court-related activities.

- The average time spent on administrative activities was 43.5 minutes and for personal activities, it was 46.3 minutes.

FIGURE 8-12: Activities per Day, by Month
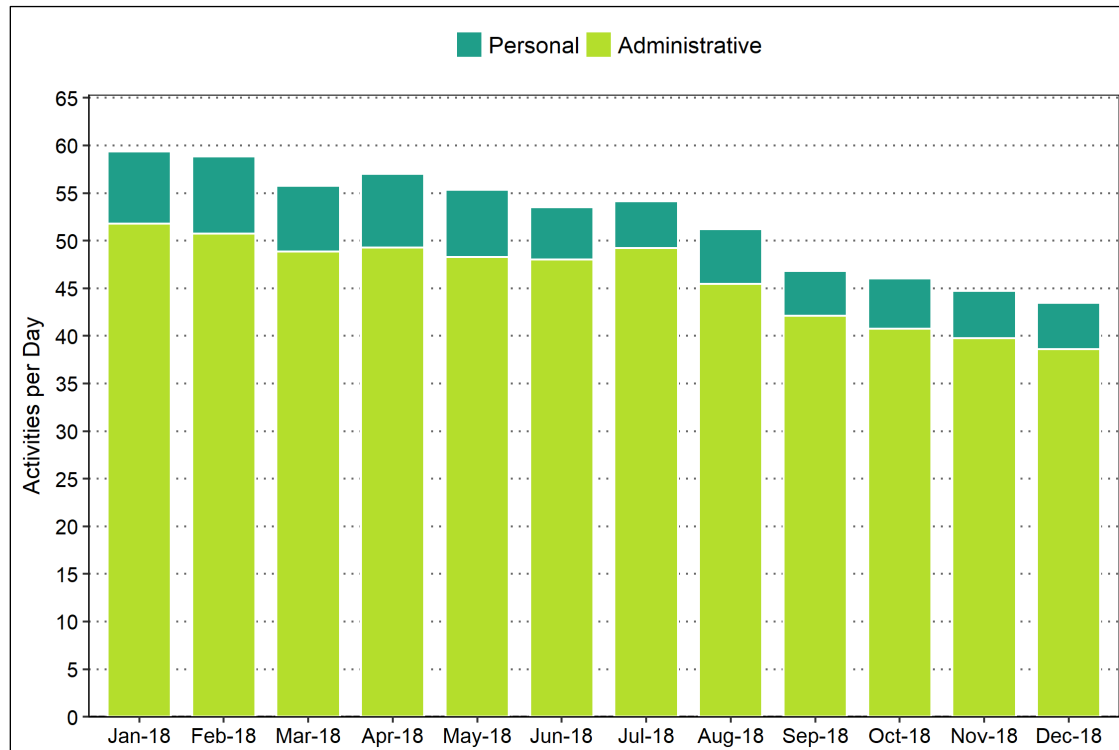
TABLE 8-13: Activities per Day, by Month

Activities	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Administrative	51.8	50.8	48.8	49.3	48.3	48.0	49.2	45.5	42.1	40.8	39.8	38.6
Personal	7.6	8.1	6.9	7.7	7.1	5.5	4.9	5.8	4.7	5.3	4.9	4.9
Total	**59.4**	**58.9**	**55.8**	**57.0**	**55.3**	**53.5**	**54.2**	**51.2**	**46.8**	**46.0**	**44.7**	**43.5**

Observations:

■ The number of activities per day was highest in January and lowest in December.

■ Administrative activities were between 86 and 91 percent of the activities per day.

FIGURE 8-13: Activities per Day, by Day of Week
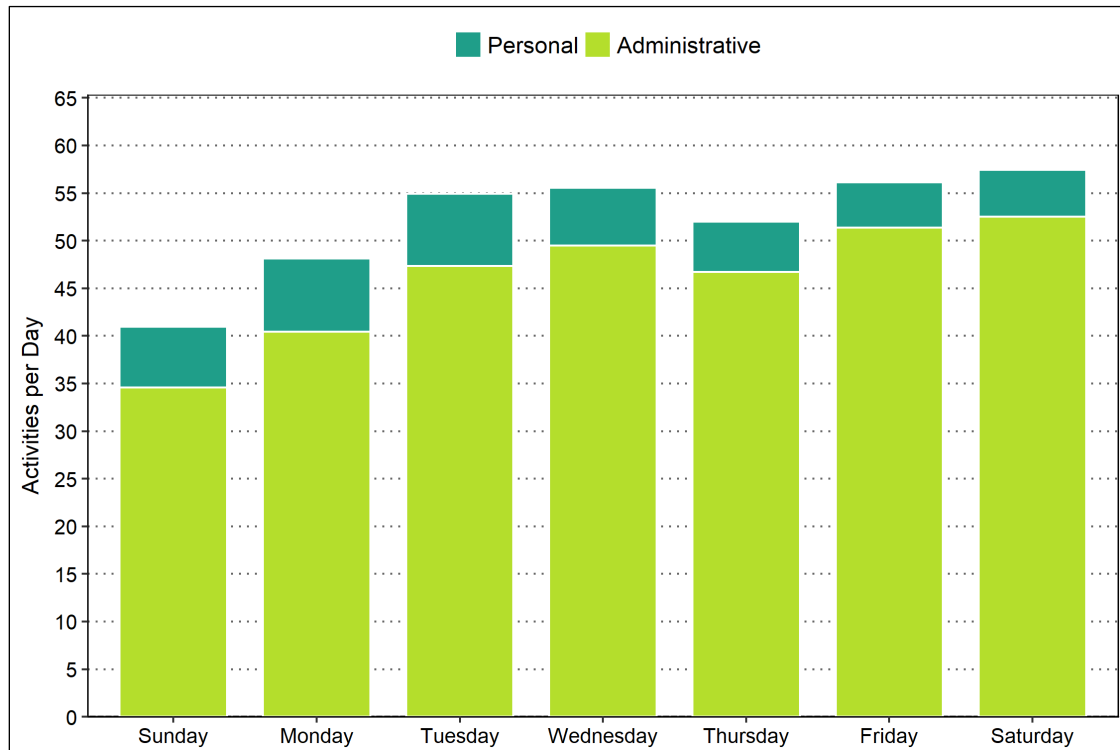
TABLE 8-14: Activities per Day, by Day of Week

Day of Week	Administrative	Personal	Activities per Day
Sunday	34.6	6.3	40.9
Monday	40.4	7.7	48.2
Tuesday	47.3	7.6	54.9
Wednesday	49.5	6.1	55.6
Thursday	46.7	5.3	52.0
Friday	51.4	4.8	56.2
Saturday	52.5	4.9	57.4
Weekly Average	**46.0**	**6.1**	**52.2**

Observations:

■ The number of noncall activities per day was lowest on Sundays and highest on Saturdays.

FIGURE 8-14: Activities per Day, by Hour of Day
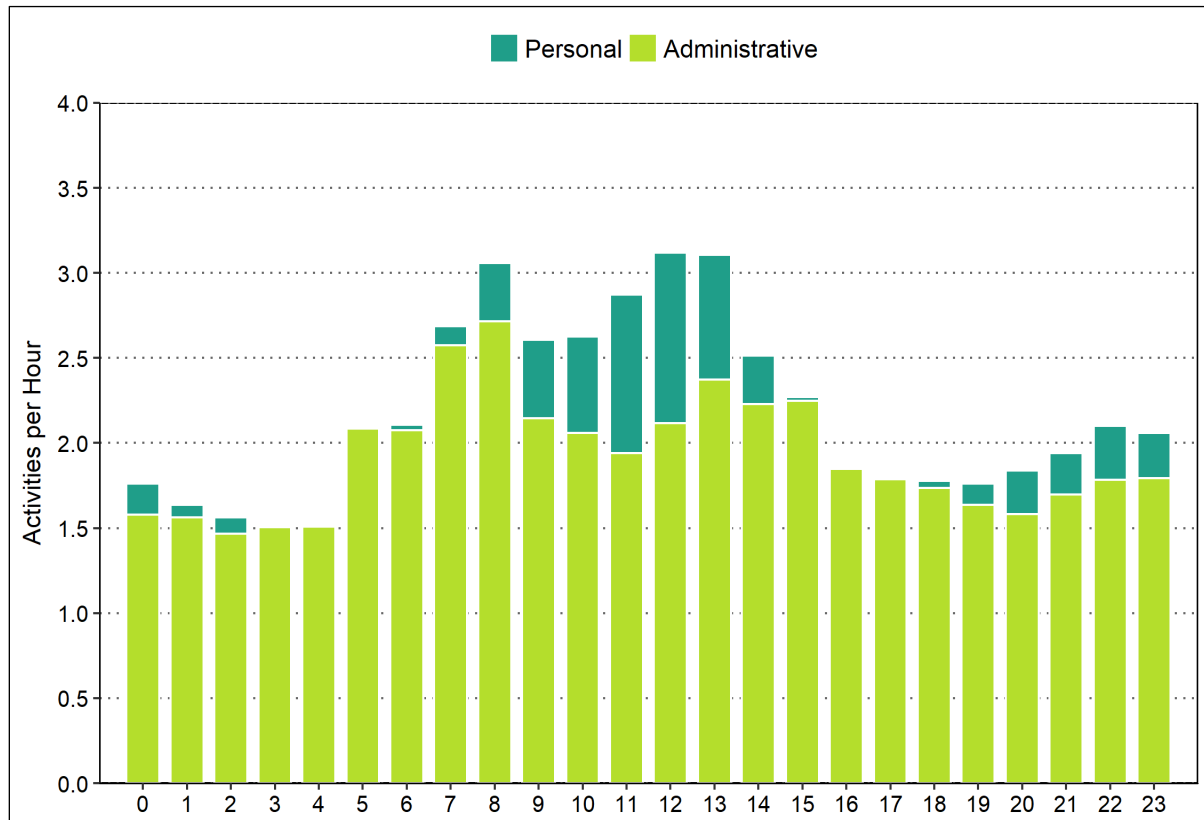
TABLE 8-15: Activities per Hour, by Hour of Day

Hour	Personal	Administrative	Total
0	0.2	1.6	1.8
1	0.1	1.6	1.6
2	0.1	1.5	1.6
3	0.0	1.5	1.5
4	0.0	1.5	1.5
5	0.0	2.1	2.1
6	0.0	2.1	2.1
7	0.1	2.6	2.7
8	0.3	2.7	3.1
9	0.5	2.1	2.6
10	0.6	2.1	2.6
11	0.9	1.9	2.9
12	1.0	2.1	3.1
13	0.7	2.4	3.1
14	0.3	2.2	2.5
15	0.0	2.2	2.3
16	0.0	1.8	1.9
17	0.0	1.8	1.8
18	0.0	1.7	1.8
19	0.1	1.6	1.8
20	0.3	1.6	1.8
21	0.2	1.7	1.9
22	0.3	1.8	2.1
23	0.3	1.8	2.1
Hourly Average	**0.3**	**1.9**	**2.2**

Observations:

- The number of activities per hour was highest between noon and 2:00 p.m.

- The number of activities per hour was lowest between 3:00 a.m. and 5:00 a.m.

DEPLOYMENT

For this study, we examined deployment information for eight weeks in winter (January 4 through February 28, 2018) and eight weeks in summer (July 7 through August 31, 2018). The department's main patrol force consists of patrol officers, sergeants, and bike patrol officers operating on 12-hour shifts starting at 4:00 a.m. and 4:00 p.m. A portion of the day shift starts later, at 5:00 a.m. and 6:00 a.m., while a portion of the evening shift starts at 5:00 p.m.

The police department's main patrol force deployed an average of 8.9 officers per hour during the 24-hour day in winter 2018 and in summer 2018. When additional units (K9, extra units, reserves, and traffic officers in DUI cars) are included, the department averaged 11.2 officers per hour during the 24-hour day in winter and 11.1 officers in summer 2018. CSO officers, motor units, and traffic accident investigators are not included in the initial analysis. They are included in separate sections of the report.

In this section, we describe the deployment and workload in distinct steps, distinguishing between winter and summer and between weekdays (Monday through Friday) and weekends (Saturday and Sunday):

- First, we focus on patrol deployment alone.
- Next, we compare "all" workload, which includes community-initiated calls, police-initiated calls, directed patrol activities, and out-of-service activities.
- Finally, we compare the workload against deployment by percentage.

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

FIGURE 8-15: Deployed Officers, Weekdays, Winter 2018
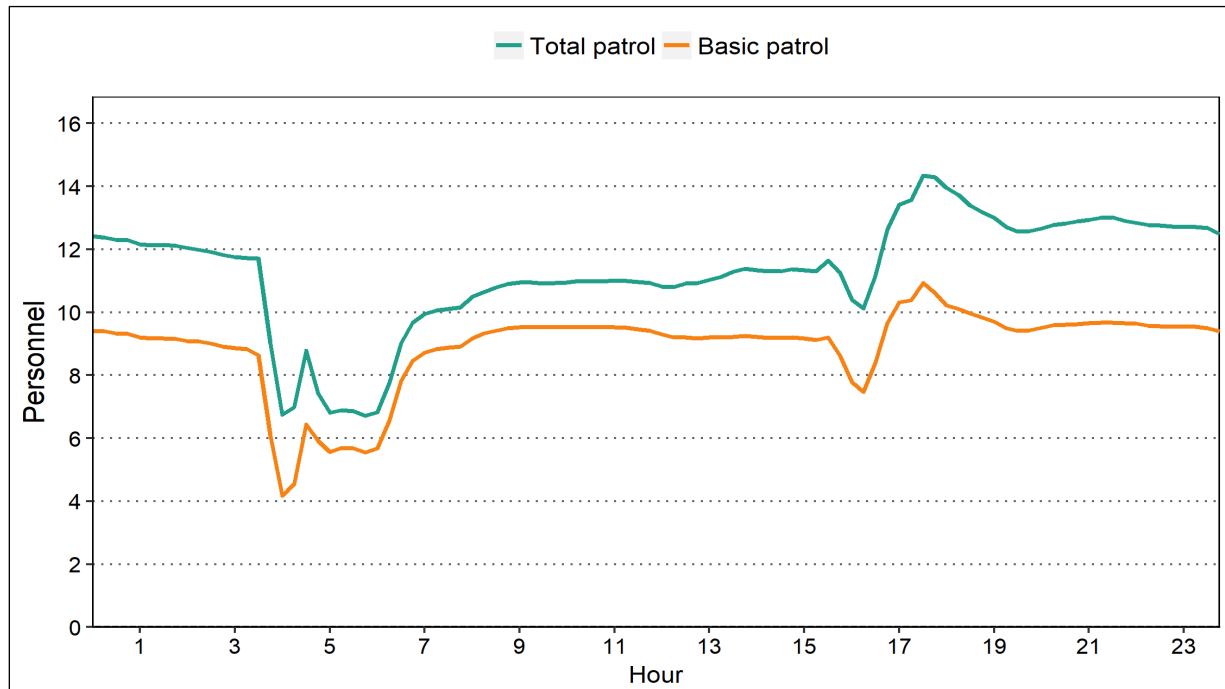
FIGURE 8-16: Deployed Officers, Weekends, Winter 2018
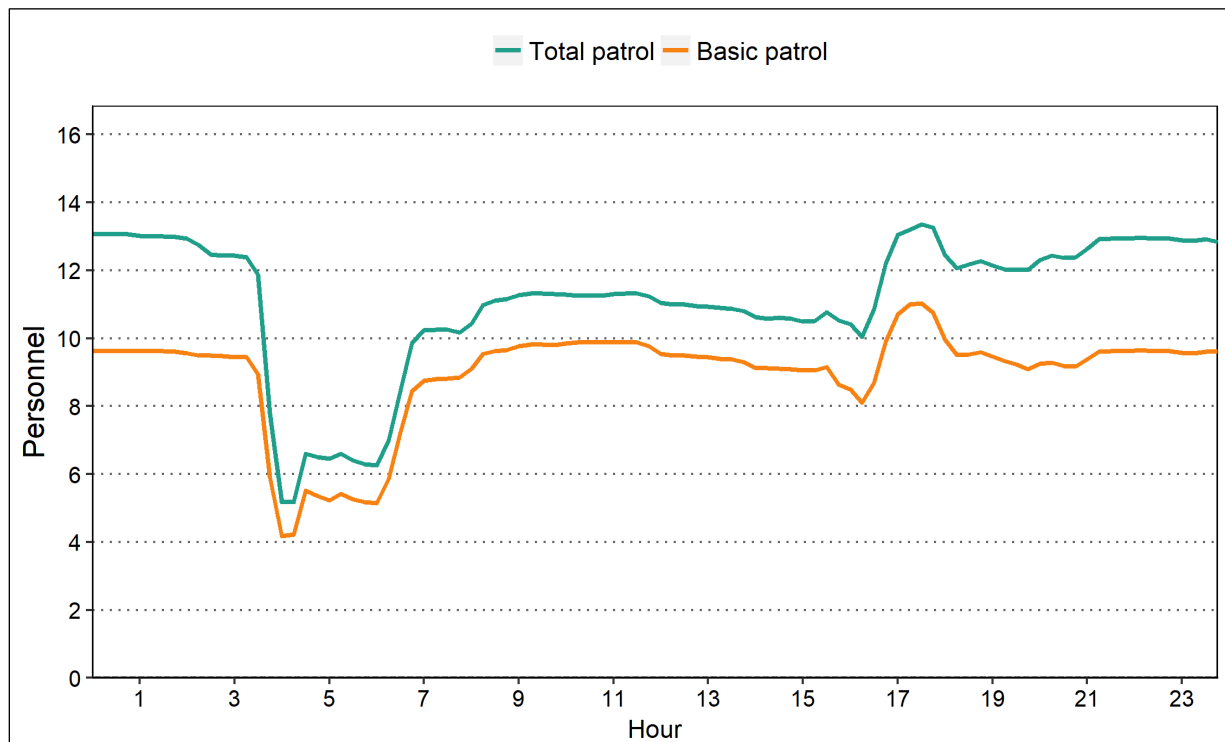
FIGURE 8-17: Deployed Officers, Weekdays, Summer 2018
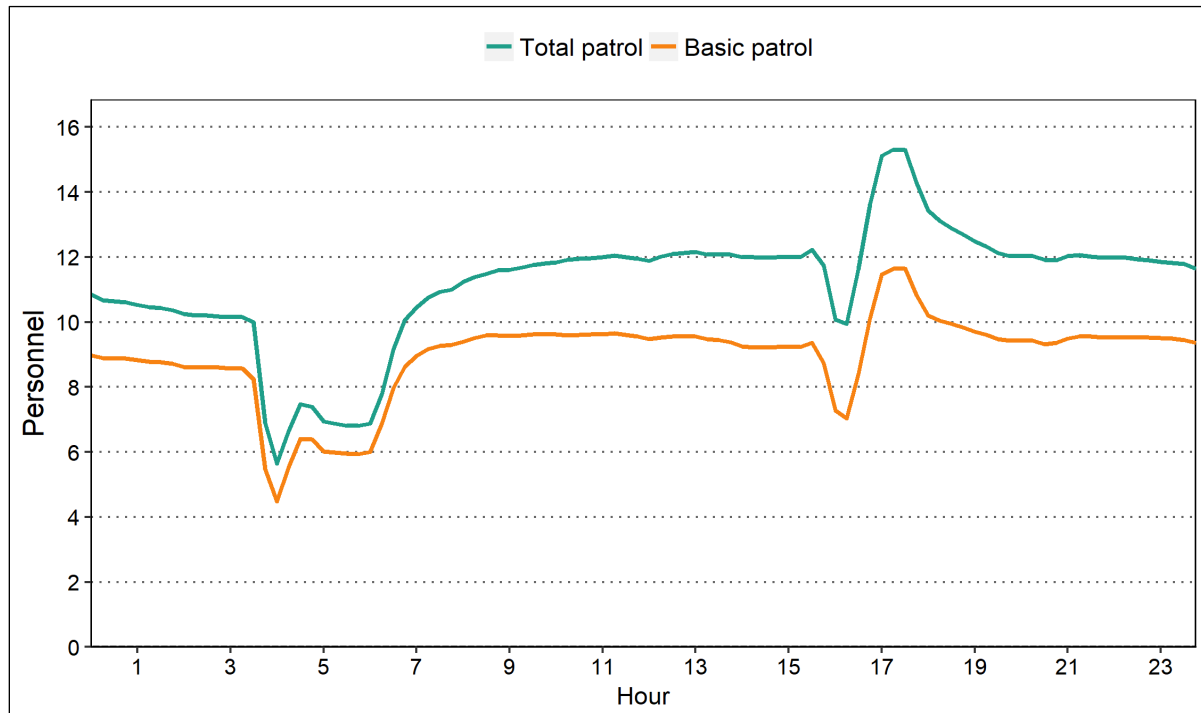
FIGURE 8-18: Deployed Officers, Weekends, Summer 2018
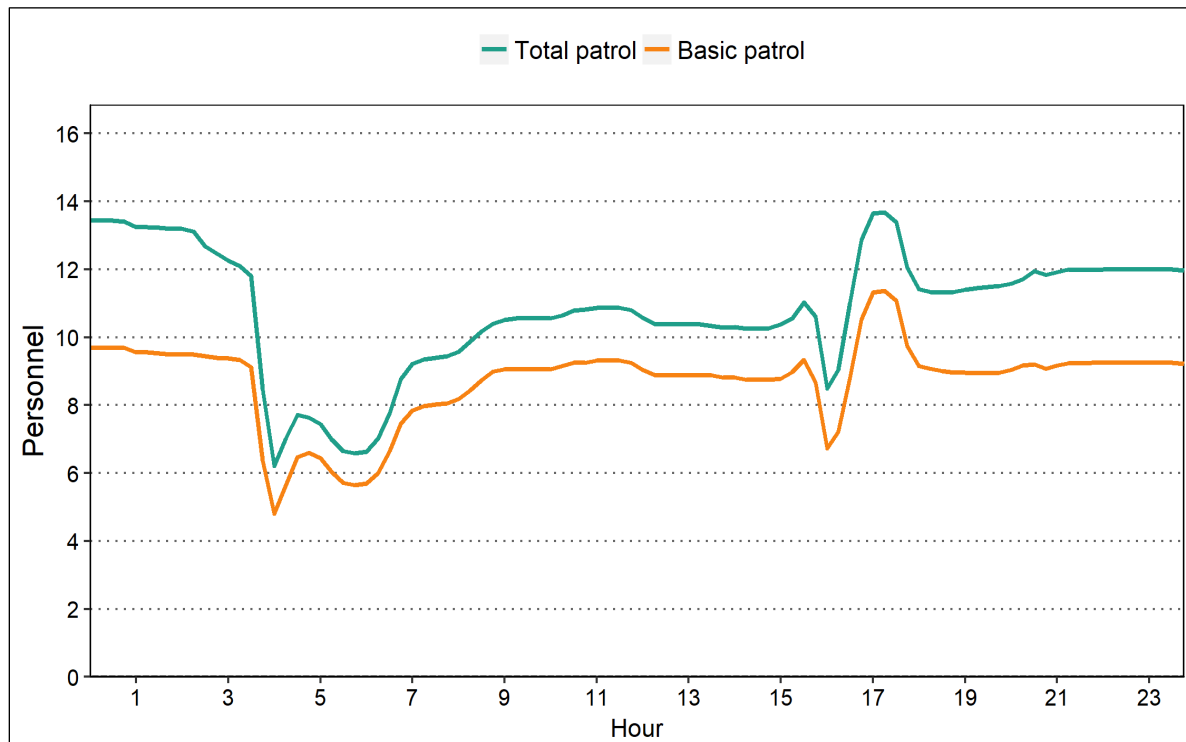
Observations:

- For winter (January 4 through February 28, 2018):

  □ The average deployment was 11.3 officers per hour during the week and 11.1 officers per hour on the weekend.

  □ Average deployment varied from 6.7 to 14.3 officers per hour on weekdays and 5.2 to 13.3 officers per hour on weekends.

- For summer (July 7 through August 31, 2018):

  □ The average deployment was 11.2 officers per hour during the week and 10.8 officers per hour on the weekend.

  □ Average deployment varied from 5.7 to 15.3 officers per hour on weekdays and 6.2 to 13.7 officers per hour on weekends.

FIGURE 8-19: Deployment and All Workload, Weekdays, Winter 2018
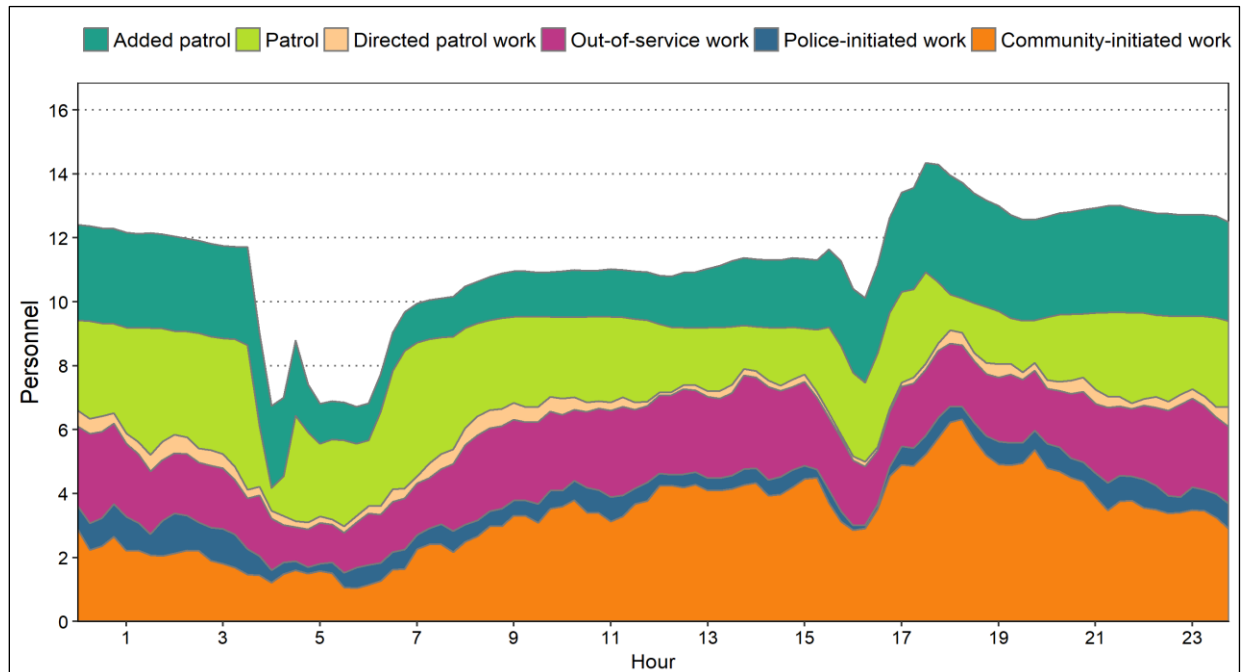
FIGURE 8-20: Deployment and All Workload, Weekends, Winter 2018
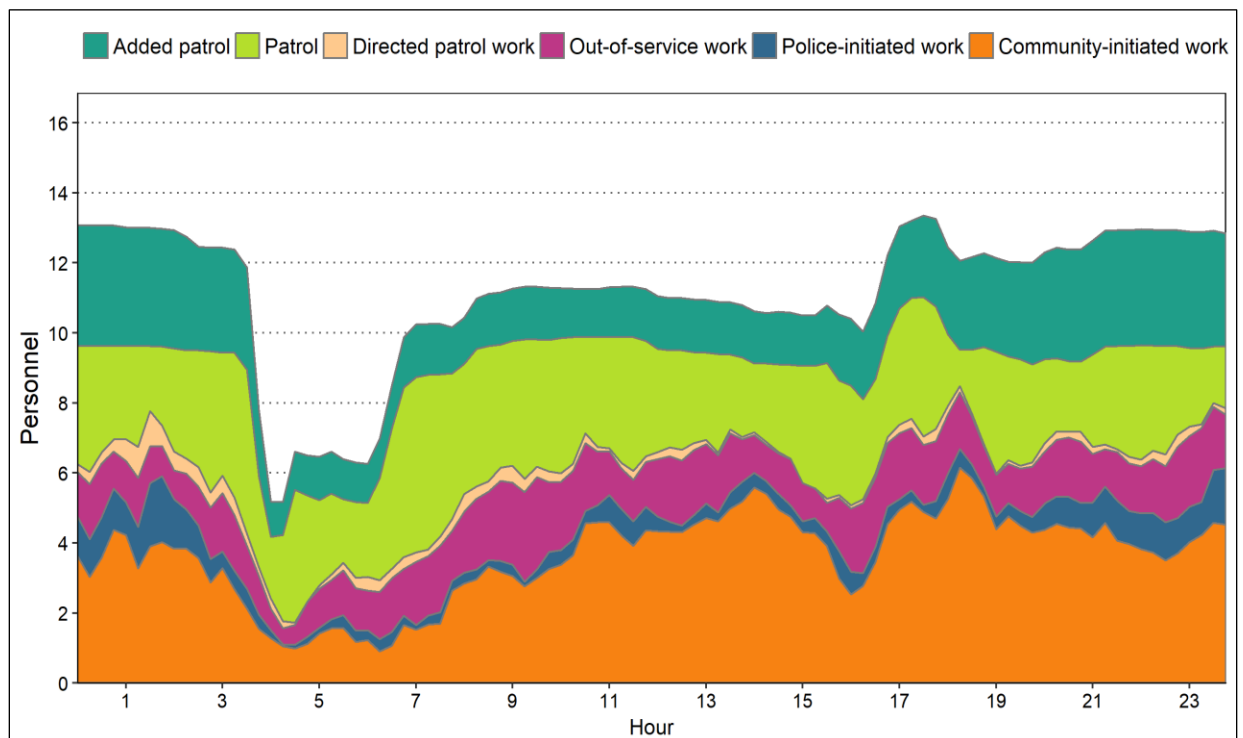
FIGURE 8-21: Deployment and All Workload, Weekdays, Summer 2018
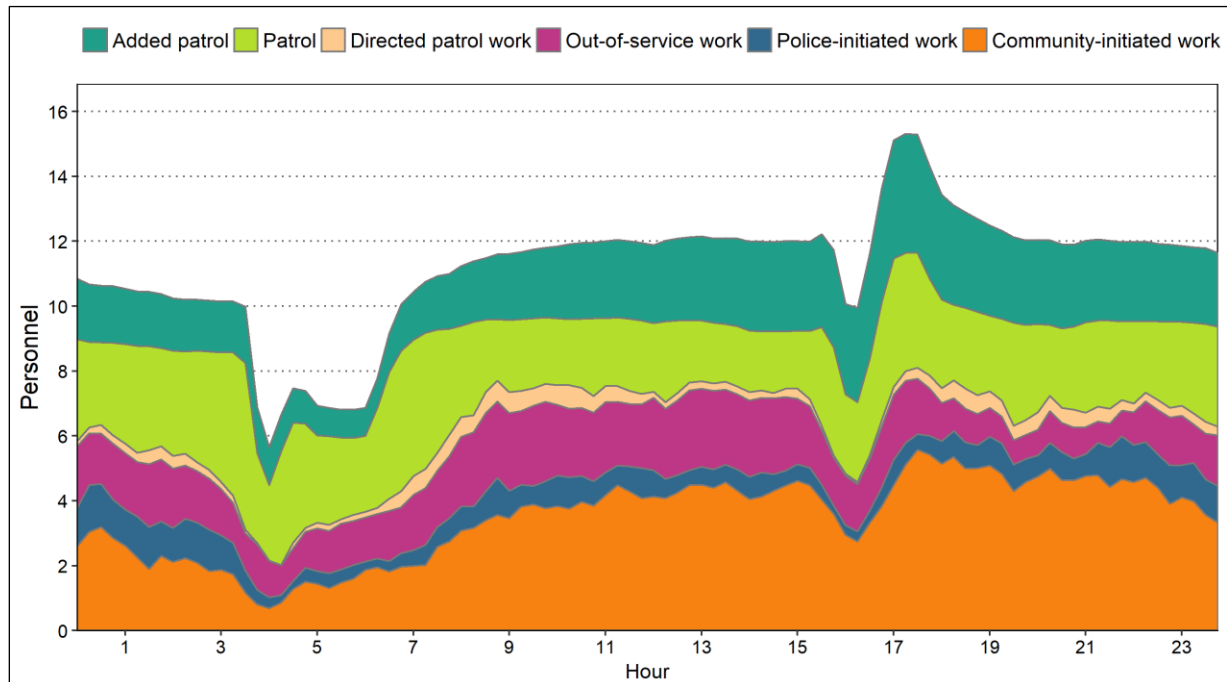
FIGURE 8-22: Deployment and All Workload, Weekends, Summer 2018
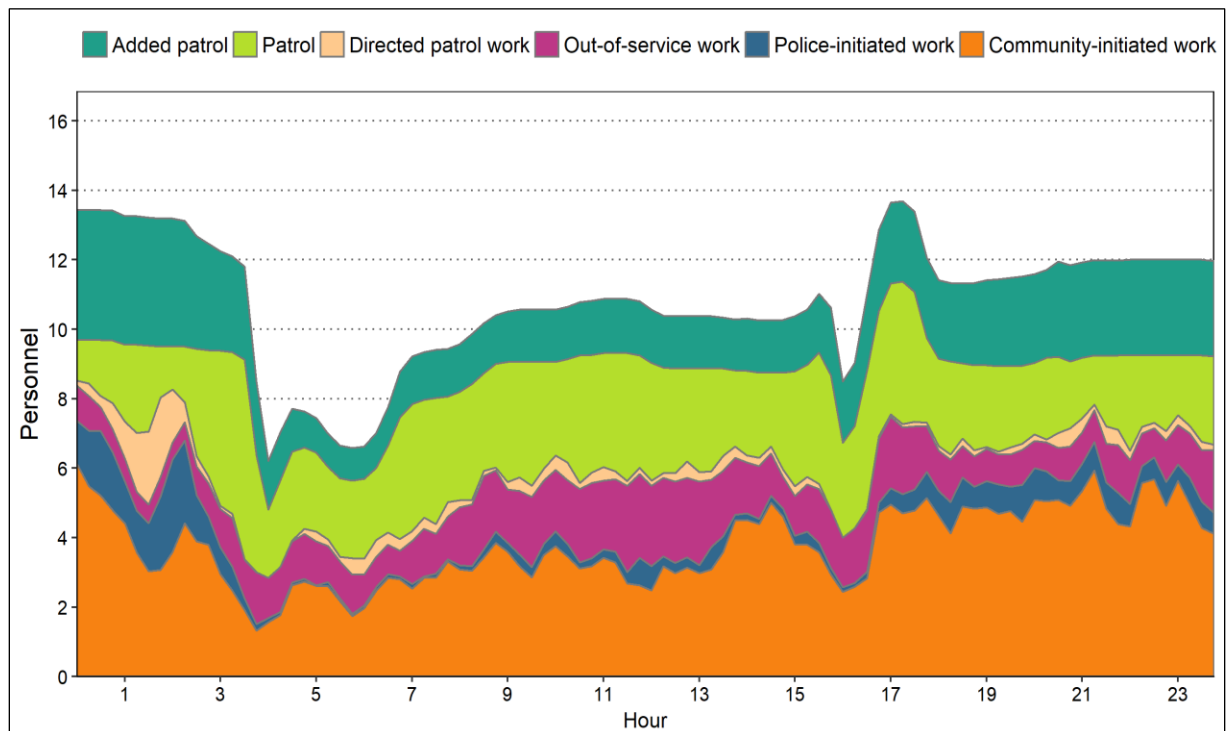
Note: Figures 8-19 to 8-22 show deployment along with all workload from community-initiated calls, police-initiated calls, directed patrol work, and out-of-service work.

Observations:

Winter:

- Community-initiated work:

  - Average other-initiated workload was 3.3 officers per hour during the week and 3.6 officers per hour on weekends.

  - This was approximately 29 percent of hourly deployment during the week and 32 percent of hourly deployment on weekends.

- All work:

  - Average workload was 6.4 officers per hour during the week and 5.9 officers per hour on weekends.

  - This was approximately 56 percent of hourly deployment during the week and 53 percent of hourly deployment on weekends.

Summer:

- Community-initiated work:

  - Average other-initiated workload was 3.5 officers per hour during the week and 3.7 officers per hour on weekends.

  - This was approximately 31 percent of hourly deployment during the week and 35 percent of hourly deployment on weekends.

- All work:

  - Average workload was 6.2 officers per hour during the week and 6.0 officers per hour on weekends.

  - This was approximately 56 percent of hourly deployment during the week and 55 percent of hourly deployment on weekends.

FIGURE 8-23: Percentage of Workload, Weekdays, Winter 2018
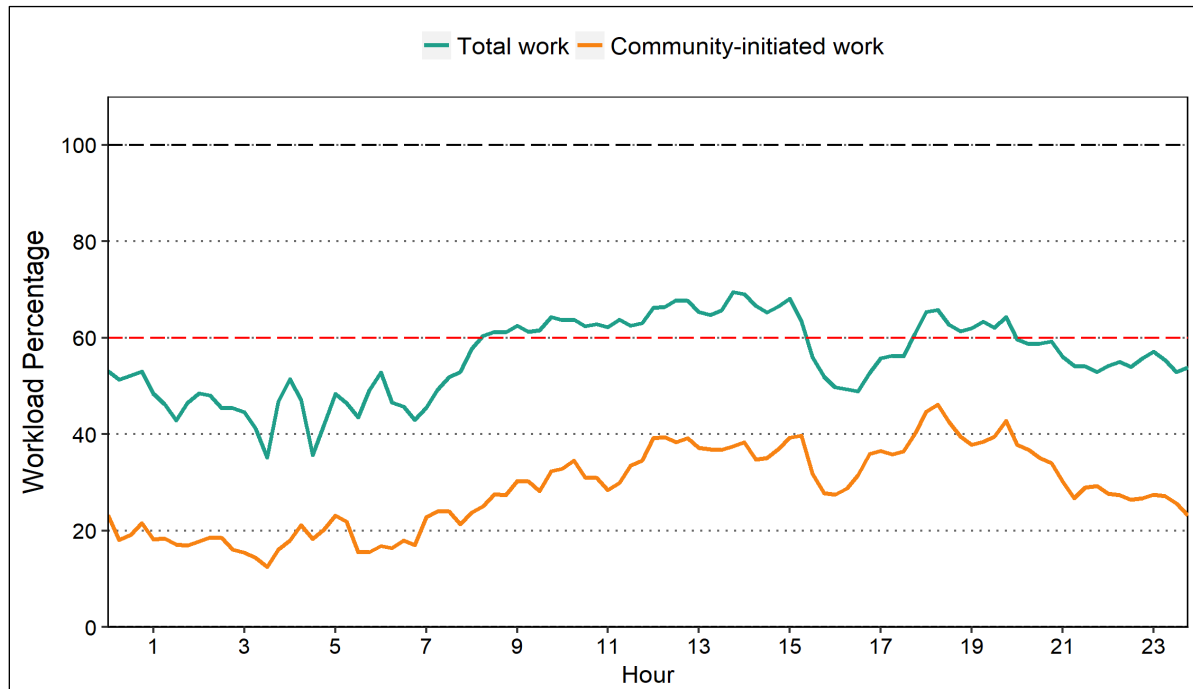
FIGURE 8-24: Percentage of Workload, Weekends, Winter 2018
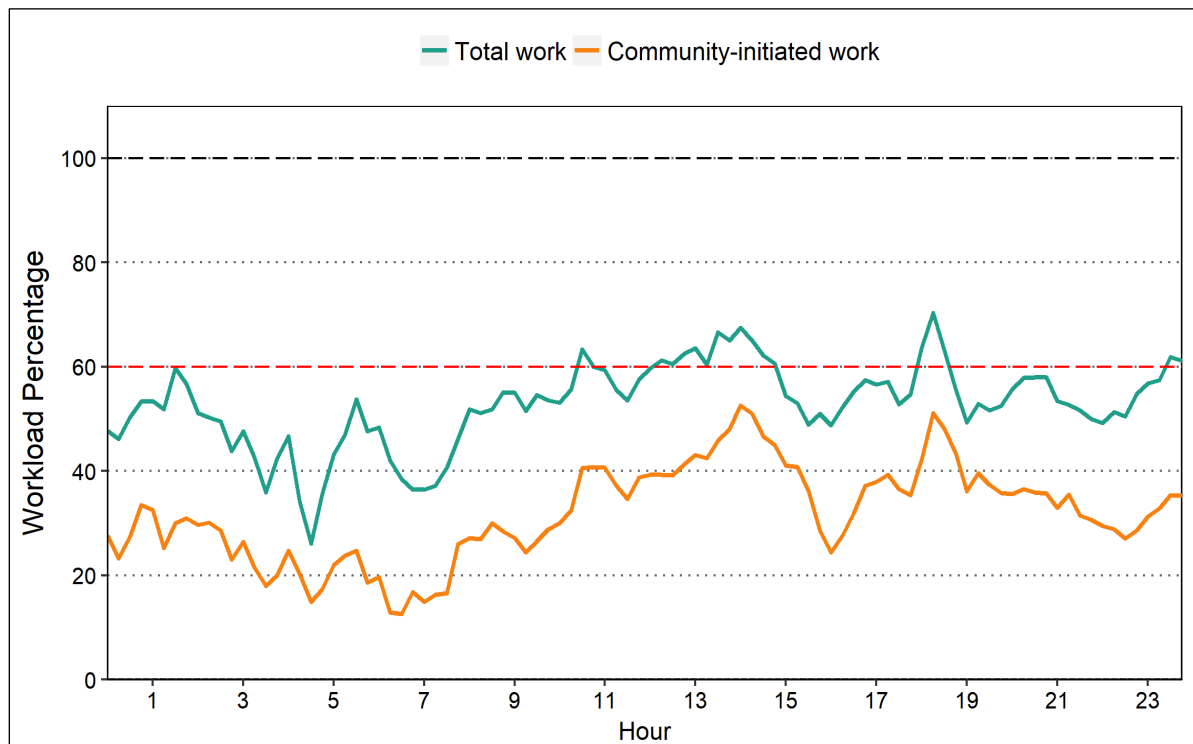
FIGURE 8-25: Percentage of Workload, Weekdays, Summer 2018
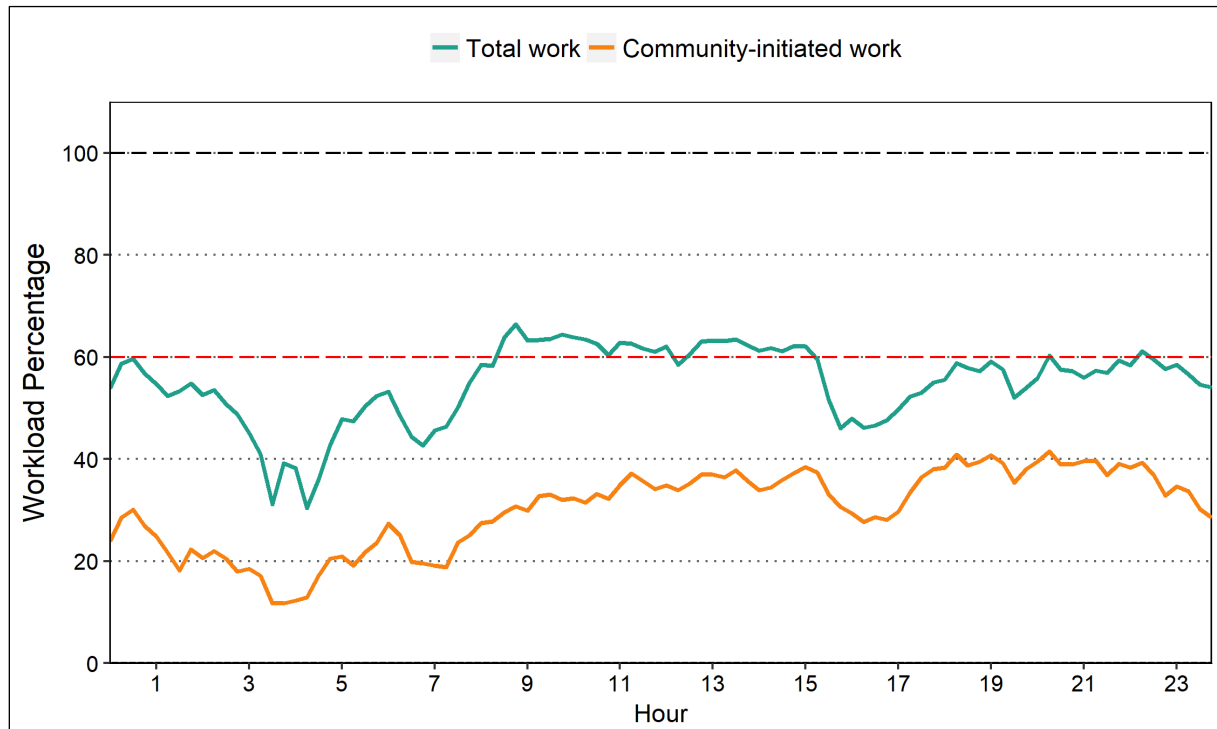
FIGURE 8-26: Percentage of Workload, Weekends, Summer 2018

Observations:

Winter:

- Community-initiated work:
  - During the week, workload reached a maximum of 46 percent of deployment between 6:15 p.m. and 6:30 p.m.
  - On weekends, workload reached a maximum of 53 percent of deployment between 2:00 p.m. and 2:15 p.m.
- All work:
  - During the week, workload reached a maximum of 74 percent of deployment between 2:15 p.m. and 2:30 p.m. and between 6:30 p.m. and 7:00 p.m.
  - On weekends, workload reached a maximum of 79 percent of deployment between 6:30 p.m. and 6:45 p.m.

Summer:

- Community-initiated work:
  - During the week, workload reached a maximum of 41 percent of deployment between 6:15 p.m. and 6:30 p.m., between 7:00 p.m. and 7:15 p.m., and between 8:15 p.m. and 8:30 p.m.
  - On weekends, workload reached a maximum of 50 percent of deployment between 9:15 p.m. and 9:30 p.m.
- All work:
  - During the week, workload reached a maximum of 66 percent of deployment between 8:45 a.m. and 9:00 a.m.
  - On weekends, workload reached a maximum of 65 percent of deployment between 2:30 p.m. and 2:45 p.m. and between 9:15 p.m. and 9:30 p.m.

RESPONSE TIMES

We analyzed the response times to various types of calls, separating the duration into dispatch delay and travel time, to determine whether response times varied by call type. Response time is measured as the difference between when a call is received and when the first unit arrives on scene. This is further divided into dispatch delay and travel time. Dispatch delay is the time between when a call is received and when the first unit is dispatched. Travel time is the remaining time until the first unit arrives on scene.

We begin the discussion with statistics that include all calls combined. We started with 6,073 calls for winter and 6,336 calls for summer. We limited our analysis to community-initiated calls, which amounted to 4,331 calls for winter and 4,533 calls for summer. In addition, we excluded calls located at the police department's headquarters. Finally, we removed a few calls lacking a recorded arriving unit. We were left with 3,890 calls in winter and 4,073 calls in summer for our analysis. For the entire year, we began with 39,850 calls, limited our analysis to 28,235 community-initiated calls. With similar exclusions, we were left with 25,382 calls.

Our initial analysis does not distinguish calls based on priority; instead, it examines the difference in response to all calls by time of day and compares winter and summer periods. We then present a brief analysis of response time for high-priority calls alone.

All Calls

This section looks at all calls without considering their priorities. In addition to examining the differences in response times by both time of day and season (winter vs. summer), we show differences in response times by category.

FIGURE 8-27: Average Response Time and Dispatch Delays, by Hour of Day, Winter and Summer 2018
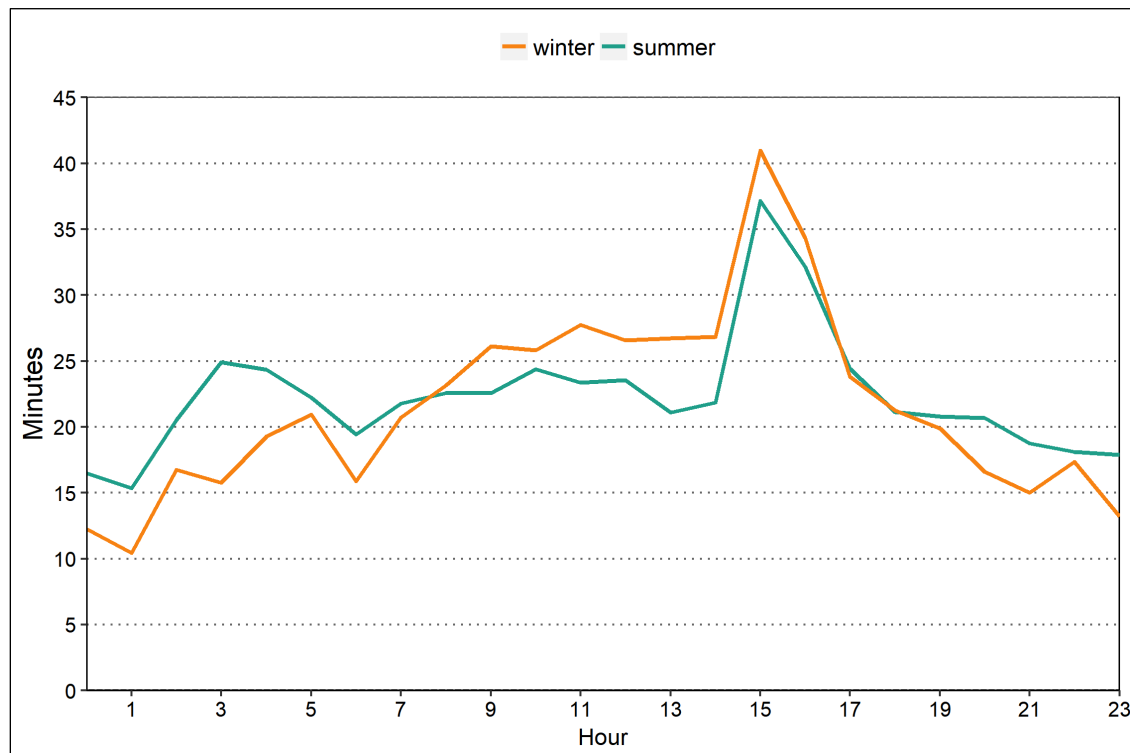
Observations:

- Average response times varied significantly by the hour of the day.

- In winter, the longest response times were between 3:00 p.m. and 4:00 p.m., with an average of 41.0 minutes.

- In winter, the shortest response times were between 1:00 a.m. and 2:00 a.m., with an average of 10.4 minutes.

- In summer, the longest response times were between 3:00 p.m. and 4:00 p.m., with an average of 37.2 minutes.

- In summer, the shortest response times were between 1:00 a.m. and 2:00 a.m., with an average of 15.3 minutes.

FIGURE 8-28: Average Response Time by Category, Winter 2018
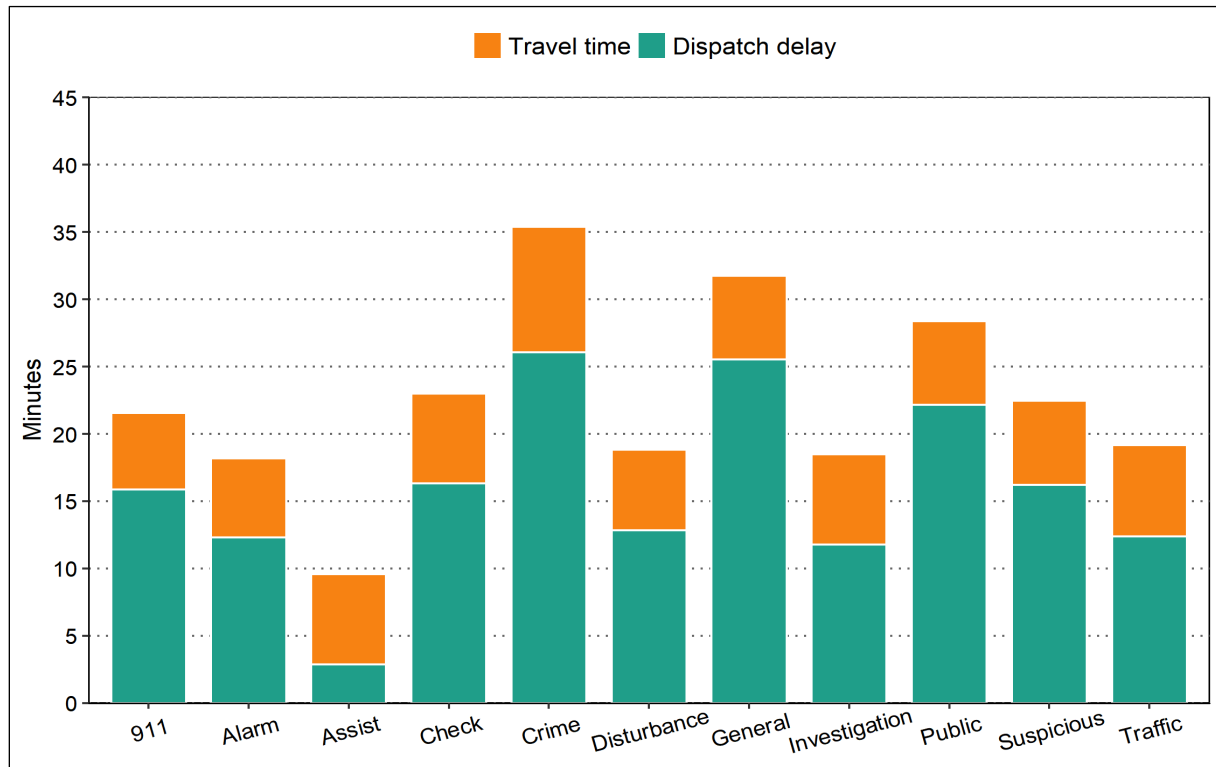
FIGURE 8-29: Average Response Time by Category, Summer 2018
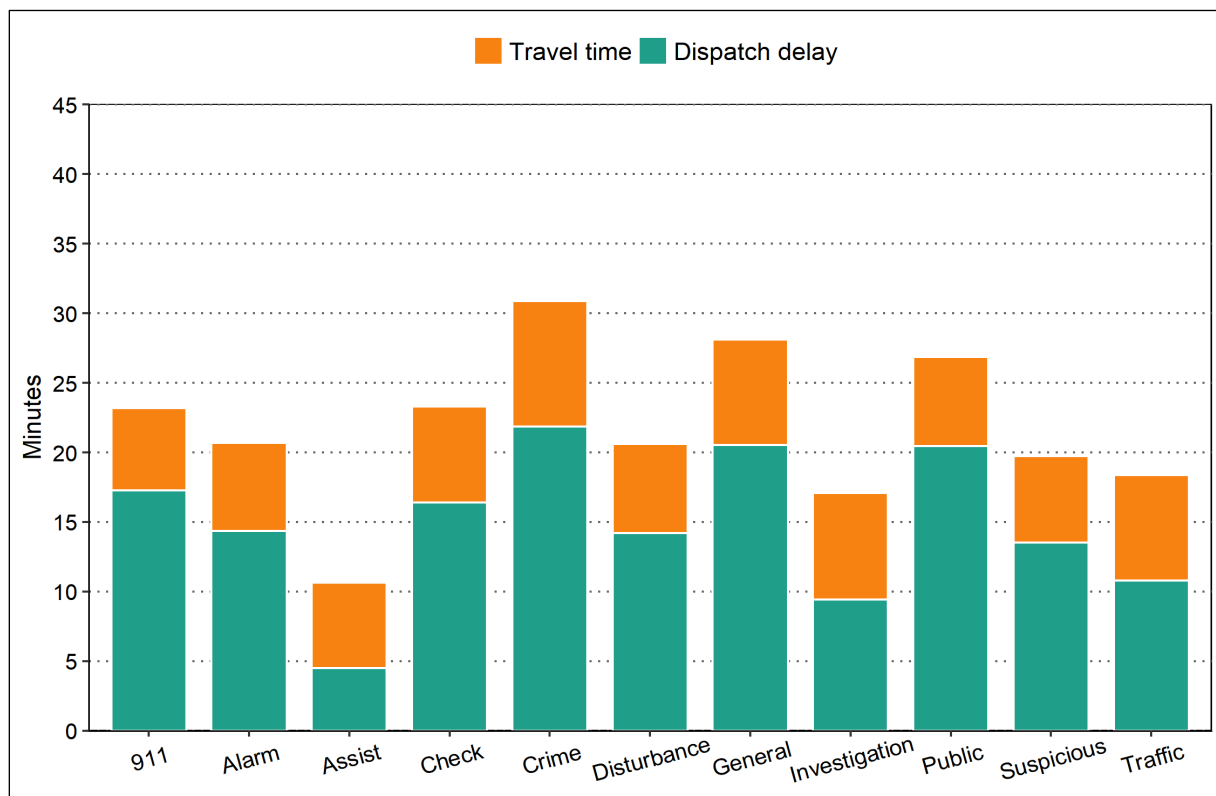
TABLE 8-16: Average Response Time Components, by Category

Category	Winter			Summer		
	Dispatch	Travel	Response	Dispatch	Travel	Response
911 hang up	15.9	5.7	21.6	17.3	5.9	23.2
Accident	6.2	6.4	12.5	4.4	6.9	11.3
Alarm	12.3	5.9	18.2	14.4	6.3	20.7
Animal	21.5	7.3	28.7	16.2	7.6	23.7
Assist other agency	2.9	6.7	9.6	4.5	6.2	10.6
Check	16.3	6.6	23.0	16.4	6.9	23.3
Crime–person	18.6	7.7	26.3	16.8	8.1	24.9
Crime–property	28.5	9.9	38.4	24.2	9.4	33.7
Disturbance	12.8	6.0	18.8	14.2	6.4	20.6
Investigation	11.8	6.7	18.5	9.4	7.7	17.1
Miscellaneous	26.1	6.1	32.2	23.1	7.6	30.7
Public contact	22.2	6.2	28.4	20.5	6.4	26.9
Suspicious incident	16.2	6.2	22.5	13.5	6.2	19.7
Traffic enforcement	15.6	7.0	22.6	14.2	8.0	22.1
Total Average	**16.4**	**6.8**	**23.2**	**15.5**	**7.1**	**22.5**

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

Observations:

- In winter, the average response time for most categories was between 10 minutes and 32 minutes.

- In winter, the average response time was as short as 10 minutes (for assists) and as long as 35 minutes (for crimes).

- In summer, the average response time for most categories was between 11 minutes and 28 minutes.

- In summer, the average response time was as short as 11 minutes (for assists) and as long as 31 minutes (for crimes).

- The average response time for crimes was 35 minutes in winter and 31 minutes in summer.

TABLE 8-17: 90th Percentiles for Response Time Components, by Category

Category	Winter			Summer		
	Dispatch	Travel	Response	Dispatch	Travel	Response
911 hang up	38.3	12.3	49.0	47.0	10.9	55.3
Accident	17.9	12.4	25.4	12.5	12.5	22.8
Alarm	31.4	10.8	41.6	37.7	12.7	46.4
Animal	57.5	12.0	57.5	39.1	14.1	72.4
Assist other agency	5.3	12.2	17.5	9.5	9.8	20.7
Check	42.7	13.6	52.4	43.0	13.1	51.6
Crime–person	64.9	16.4	81.3	58.2	21.0	92.3
Crime–property	93.5	24.4	118.4	77.4	20.6	92.5
Disturbance	38.2	12.2	49.6	44.6	12.3	50.9
Investigation	38.3	16.6	52.0	23.8	14.8	46.6
Miscellaneous	91.0	14.6	118.4	58.5	21.4	75.7
Public contact	76.1	12.6	87.9	69.6	13.8	79.3
Suspicious incident	46.8	12.4	55.1	35.3	11.9	43.4
Traffic enforcement	44.0	14.7	57.6	42.9	20.1	60.3
Total Average	**52.0**	**14.0**	**63.8**	**46.4**	**14.6**	**58.5**

Note: A 90th percentile value of 63.8 minutes means that 90 percent of all calls are responded to in fewer than 63.8 minutes. For this reason, the columns for dispatch delay and travel time may not be equal to the total response time.

Observations:

- In winter, the 90th percentile value for response time was as short as 18 minutes (for assists) and as long as 118 minutes (for general noncriminal calls).

- In summer, the 90th percentile value for response time was as short as 21 minutes (for assists) and as long as 93 minutes (for crimes).

FIGURE 8-30: Average Response Time Components, by Beat
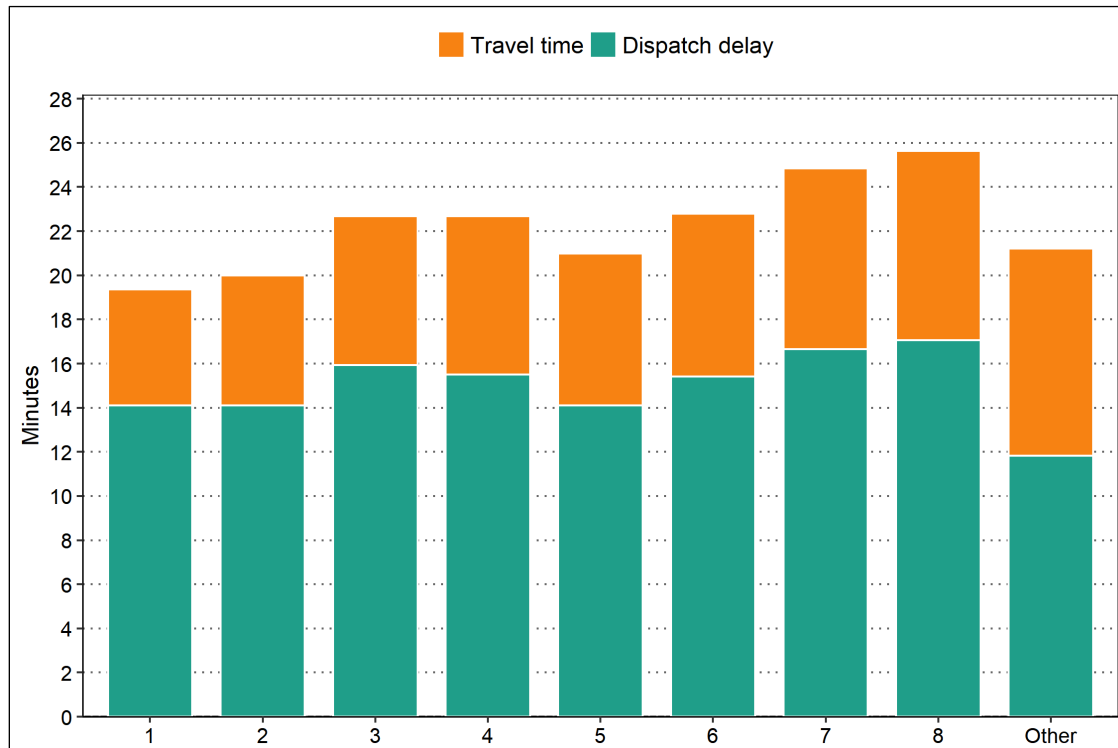
Note: The "other" category includes about 364 calls with unknown beats and beats "9," "10," and "ES."

TABLE 8-18: Average Response Time Components, by Beat

Beat	Dispatch	Travel	Response	Calls	Area (Sq. Miles)
1	14.1	5.3	19.4	3,756	1.3
2	14.1	5.9	20.0	3,268	1.9
3	15.9	6.8	22.7	2,395	3.3
4	15.5	7.2	22.7	3,272	4.9
5	14.1	6.9	21.0	1,976	8.0
6	15.4	7.4	22.8	3,978	5.1
7	16.7	8.2	24.8	3,373	8.6
8	17.1	8.6	25.6	3,000	6.6
Other	11.8	9.4	21.2	364	NA
Weighted Average/ Total	**15.3**	**7.0**	**22.3**	**25,382**	**42.0**

Observations:

- Beat 1 had the shortest overall response time.

- Beat 8 had the longest overall response time.

High-priority Calls

The department assigned priorities to calls with priority 1 as the highest priority. Table 8-19 shows average response times by priority. Figure 8-31 focuses on priority 1 calls only. Throughout this section, we took measures to limit the effects of calls with long response times on the overall average. This may have caused us to underestimate the average response times for priority 3 and 4 calls.

TABLE 8-19: Average Dispatch, Travel, and Response Times, by Priority

Priority	Dispatch Delay	Travel Time	Response Time	Calls
1	1.7	4.9	6.6	721
2	11.5	6.4	17.9	17,664
3	27.0	9.6	36.5	4,859
4	24.6	7.3	32.0	2,138
Weighted Average/Total	**15.3**	**7.0**	**22.3**	**25,382**

Note: The total average is weighted according to the number of calls within each priority level.

FIGURE 8-31: Average Response Times and Dispatch Delays for High-priority Calls, by Hour
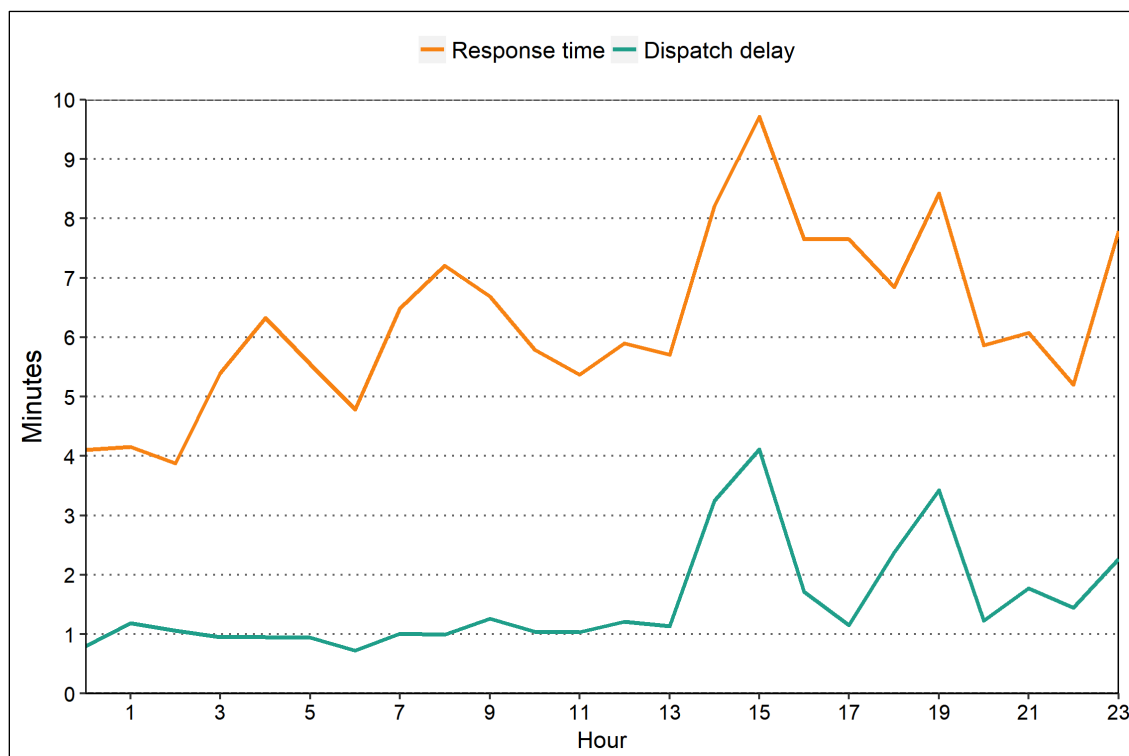
Observations:

- High-priority calls (priority 1) had an average response time of 6.6 minutes, lower than the overall average of 22.3 minutes for all calls.

- Average dispatch delay was 1.7 minutes for high-priority calls, compared to 15.3 minutes overall.

- For high-priority calls, the longest response times were between 3:00 p.m. and 4:00 p.m., with an average of 9.7 minutes.

- For high-priority calls, the shortest response times were between 2:00 a.m. and 4:00 a.m., with an average of 3.9 minutes.

- Average dispatch delay for high-priority calls was consistently 2.5 minutes or less, except between 2:00 p.m. and 4:00 p.m., and between 7:00 p.m. and 8:00 p.m.

TRAFFIC UNITS

Between January 1, 2018 and December 31, 2018, the dispatch center recorded 5,117 events which involved accident investigators and motor units. During this period, the dispatch center also recorded activities assigned to traffic units that were not assigned a call number. After excluding activities that lasted less than 30 seconds or over 8 hours, 1,028 noncall activities were included in the analysis.

This section gives an overview of the number of calls, out-of-service activities, deployment, and workload for traffic units. The first two tables contain data for the entire year. For the next two figures, the detailed workload analysis, we use two eight-week sample periods. The first period is from January 4 through February 28, 2018, or winter, and the second period is from July 7 through August 31, 2018, or summer. Since traffic units were usually deployed between 6:00 a.m. and 5:00 p.m., Monday through Friday, we only included these hours in the detailed workload analysis.

TABLE 8-20: Traffic Events, Calls, and Workload by Category

Category	Events	Calls	Work Hours
911 hang up	4	4	0.4
Accident	198	197	316.6
Alarm	14	14	3.3
Animal	7	6	3.8
Assist other agency	35	33	24.6
Check	291	291	409.4
Crime–person	21	19	13.7
Crime–property	22	21	16.1
Directed patrol	211		
Disturbance	24	23	25.3
Investigation	50	50	55.8
Miscellaneous	40	40	84.4
Out of service–administrative	271		
Public contact	73	72	25.0
Suspicious incident	46	45	19.7
Traffic enforcement	3,810	3,792	792.4
Total	**5,117**	**4,607**	**1,790.6**

Note: Events include all recorded calls which involved a traffic unit. We removed events with zero time on scene, directed patrol, and out-of-service activities when calculating the number of calls and the work hours associated with each call category.

TABLE 8-21: Traffic Activities and Occupied Times by Description

Description	Occupied Time	Count
At station	84.2	59
Car wash	21.0	19
City yard	84.7	55
Court	124.1	36
Enroute out of service	26.9	44
Meeting	123.1	87
Office routine	77.1	168
Officer training	143.2	219
Out of car	51.3	35
Out of service	27.5	340
Range	99.5	10
Reports	113.7	154
Administrative - Weighted Average/Total Activities	**81.8**	**1,226**
Meal break	47.9	77
Weighted Average/Total Activities	**79.8**	**1,303**

Observations:

- There were 38 zero on scene calls that involved traffic units.

- 4.1 percent of the events were directed patrol events and 5.3 percent were out of service–administrative events.

- 87 percent of the calls and 63 percent of the workload were traffic calls. Traffic enforcement and accidents are included in traffic calls.

- Out-of-service activities had an average duration of 79.8 minutes.

- The most common administrative activity was labelled "out of service."

- The activity with the longest average duration was "officer training."

FIGURE 8-32: Traffic Calls per Day, by Month
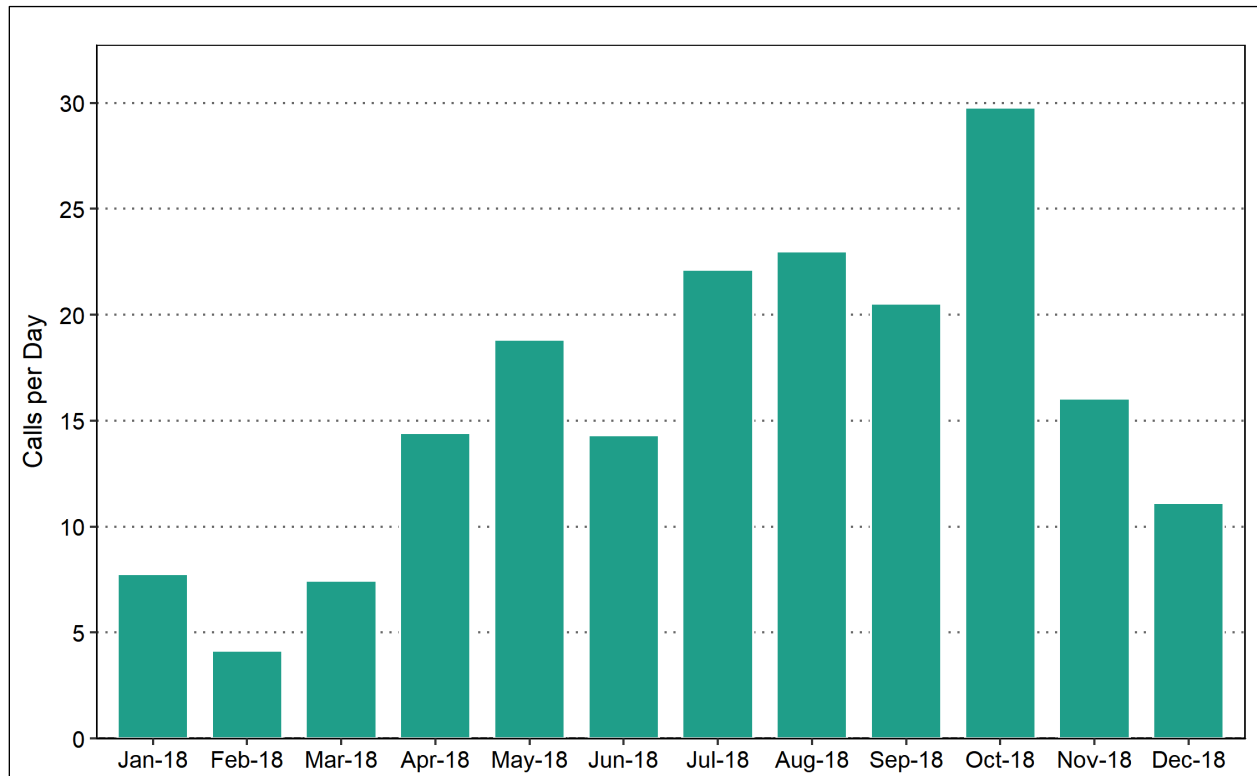
Note: The number of calls per day was calculated based on the number of days in the month that traffic officers handled at least one call.

TABLE 8-22: Traffic Calls per Day, by Month

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Calls per Day	7.8	4.2	7.4	14.4	18.8	14.3	22.1	23.0	20.5	29.8	16.0	11.1

Observations:

- The number of calls per day varied significantly throughout the year.
- February had the least number of calls and October had the largest number of calls.

FIGURE 8-33: Deployment and All Workload, Weekdays, Traffic Units
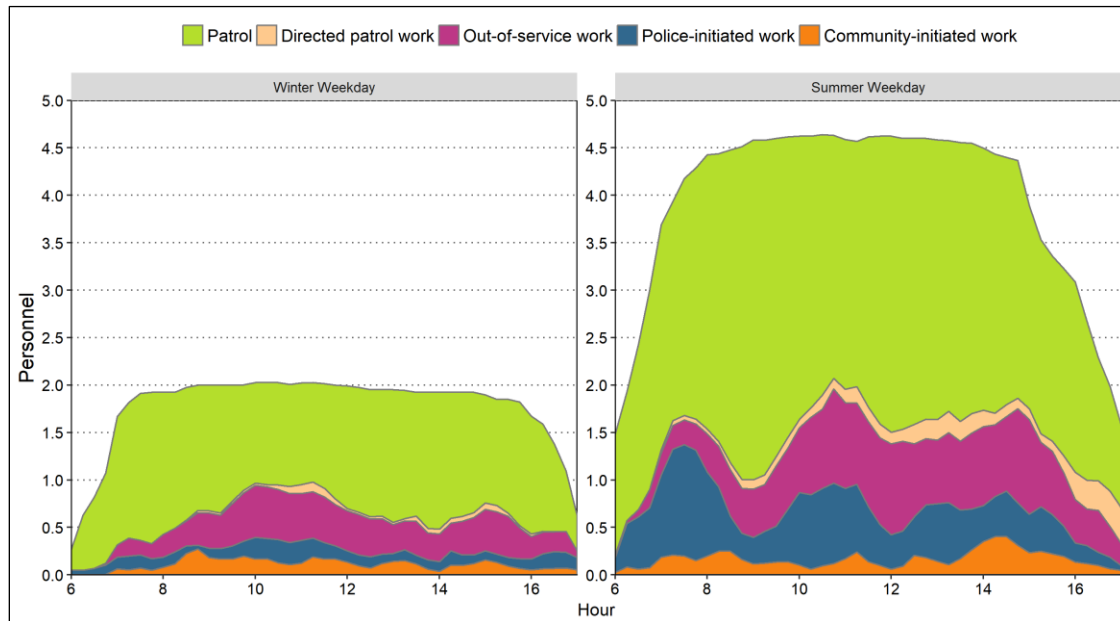
FIGURE 8-34: Workload Percentage by Hour, Traffic Units

Observations:

Winter:

- Deployment:
  - □ The average deployment was 1.8 traffic officers per hour in winter.
  - □ Average deployment varied from 0.3 to 2.0 traffic officers per hour.
- Other-initiated work:
  - □ Average other-initiated workload was 0.1 officers per hour, which was approximately 6 percent of hourly deployment.
  - □ Average workload reached a maximum of 14 percent of deployment between 8:45 a.m. and 9:00 a.m.
- All work:
  - □ Average total workload was 0.6 officers per hour.
  - □ This was approximately 33 percent of hourly deployment.
  - □ During the week, workload reached a maximum of 48 percent of deployment between 11:15 a.m. and 11:30 a.m.

Summer:

- Deployment:
  - □ The average deployment was 4.0 traffic officers per hour in summer.
  - □ Average deployment varied from 1.5 to 4.6 traffic officers per hour.
- Other-initiated work:
  - □ Average other-initiated workload was 0.1 officers per hour, which was approximately 4 percent of hourly deployment.
  - □ Average workload reached a maximum of 9 percent of deployment between 2:30 p.m. and 2:45 p.m.
- All work:
  - □ Average total workload was 1.4 officers per hour, which was approximately 36 percent of hourly deployment.
  - □ During the week, workload reached a maximum of 45 percent of deployment between 10:45 a.m. and 11:00 a.m., between 3:00 p.m. and 3:15 p.m., and at 5:00 p.m.

COMMUNITY SERVICE OFFICERS

Between January 1, 2018 and December 31, 2018, the dispatch center recorded 4,933 events which involved community service officers (CSOs). During this period, the dispatch center also recorded activities assigned to CSOs that were not assigned a call number. After excluding activities that lasted less than 30 seconds or over 8 hours, 814 noncall activities were included in the analysis.

This section gives an overview of the number of calls, out-of-service activities, deployment, and workload for CSOs. The first two tables contain data for the entire year. For the next two figures, the detailed workload analysis, we use two eight-week sample periods. The first period is from January 4 through February 28, 2018, or winter, and the second period is from July 7 through August 31, 2018, or summer. Since CSOs were usually deployed between 6:00 a.m. and midnight, we only included these hours in the detailed workload analysis.

TABLE 8-23: CSO Events and Calls, by Category

Category	Events	Calls	Work Hours
Accident	53	53	46.3
Alarm	2	2	1.0
Animal	18	15	4.4
Assist other agency	21	20	15.2
Check	221	220	109.7
Crime-person	48	47	55.9
Crime-property	1,361	1,342	1,420.6
Directed patrol	700		
Disturbance	15	15	19.6
Investigation	182	180	164.5
Miscellaneous	181	178	115.6
Out of service-administrative	221		
Public contact	95	94	49.1
Suspicious incident	53	52	34.8
Traffic enforcement	1,762	1,728	621.4
Total	**4,933**	**3,946**	**2,658.2**

Note: Events include all recorded calls which involved a CSO unit. We removed events with zero time on scene, directed patrol, and out-of-service activities when calculating the number of calls and the work hours associated with each call category.

TABLE 8-24: CSO Activities and Occupied Times by Description

Description	Occupied Time	Count
At Station	39.1	98
Car Wash	19.1	39
Court	180.0	3
Meeting	46.4	37
Office Routine	34.0	116
Officer Training	92.7	24
Out of Car	13.9	188
Out of Service	49.9	6
Reports	44.9	305
VIA 1021	19.1	1
Administrative - Weighted Average/Total Activities	**36.3**	**817**
Meal Break	41.1	218
Weighted Average/Total Activities	**37.3**	**1,035**

Observations:

- There were 72 zero on scene calls that involved CSOs.

- 14 percent of the events were directed patrol events and 4 percent were out of service–administrative events.

- The top three categories—traffic (enforcement and accidents), crime (person and property), and checks—accounted for 86 percent of calls.

- Traffic enforcement accounted for 44 percent of calls and 23 percent of workload.

- Property crime calls accounted for 34 percent of calls and 53 percent of workload.

- Out-of-service activities had an average duration of 37.3 minutes.

- The most common administrative activity was "reports."

FIGURE 8-35: CSO Calls per Day, by Month
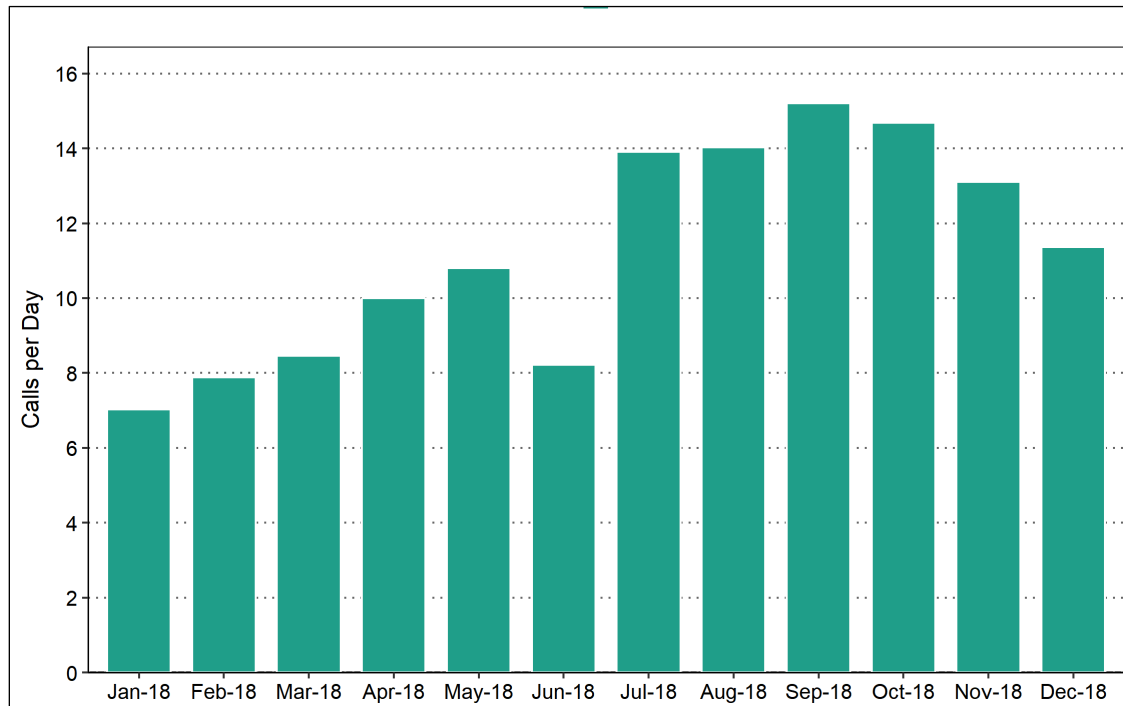
Note: The number of calls per day was calculated based on the number of days in the month that community service officers handled at least one call.

TABLE 8-25: CSO Calls per Day, by Month

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Calls per Day	7.0	7.9	8.5	10.0	10.8	8.2	13.9	14.0	15.2	14.7	13.1	11.4

Observations:

- The number of calls per day was lowest in the month of January and highest in the month of September.

FIGURE 8-36: Deployment and All Workload, Weekdays, CSO Units
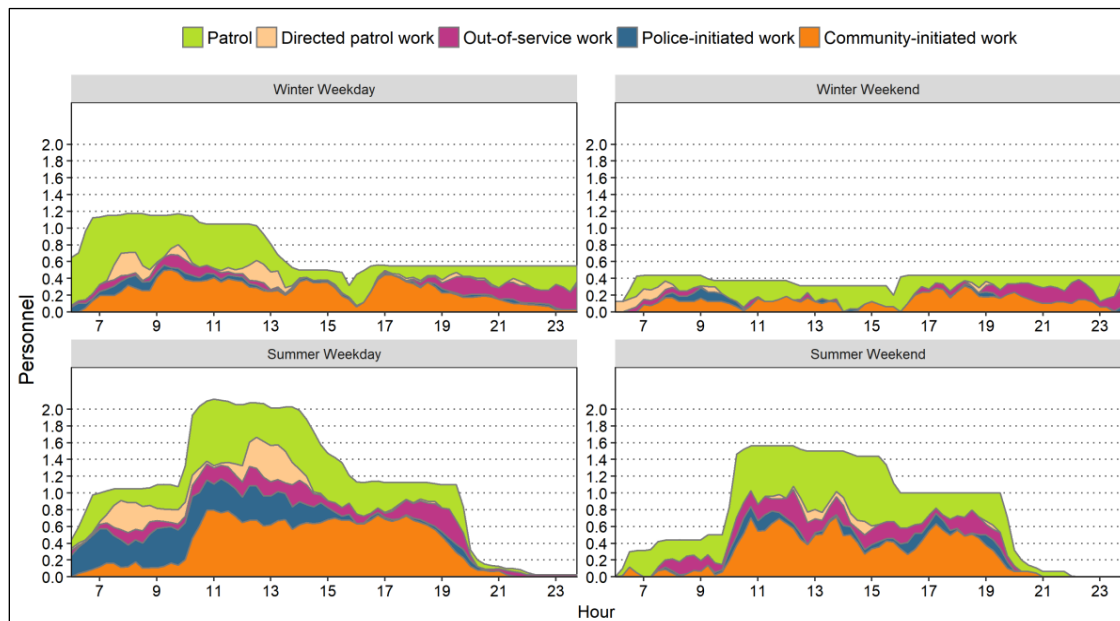
FIGURE 8-37: Workload Percentage by Hour, CSO Units

Observations:

Winter:

- Deployment:

  - The average deployment was 0.6 officers per hour during the 24-hour day in winter.

  - The average deployment was 0.7 officers per hour during the week and 0.4 officers per hour on the weekend.

  - Average deployment varied from 0.3 to 1.2 officers per hour on weekdays and 0.1 to 0.4 officers per hour on weekends.

- Other-initiated work:

  - Average other-initiated workload was 0.2 officers per hour during the week and 0.1 officers per hour on weekends.

  - This was approximately 33 percent of hourly deployment during the week and 32 percent of hourly deployment on weekends.

  - During the week, workload reached a maximum of 80 percent of deployment between 5:00 p.m. and 5:30 p.m.

  - During the weekend, workload reached a maximum of 71 percent of deployment between 6:15 p.m. and 6:30 p.m.

- All work:

  - Average total workload was 0.4 officers per hour during the week and 0.2 officers per hour on weekends.

  - This was approximately 56 percent of hourly deployment during the week and 57 percent of hourly deployment on weekends.

  - During the week, workload reached a maximum of 89 percent of deployment between 5:00 p.m. and 5:15 p.m.

  - On weekends, workload reached a maximum of 89 percent of deployment between 11:15 p.m. and 11:30 p.m.

Summer:

- Deployment:
  - The average deployment was 1.0 officer per hour during the 24-hour day in summer.
  - The average deployment was 1.1 officers per hour during the week and 0.8 officers per hour on the weekend.
  - Average deployment varied from 0 to 2 officers per hour on weekdays and 0 to 1.6 officers per hour on weekends.

- Other-initiated work:
  - Average other-initiated workload was 0.4 officers per hour during the week and 0.3 officers per hour on weekends.
  - This was approximately 34 percent of hourly deployment during the week and on weekends.
  - During the week, workload reached a maximum of 64 percent of deployment between 4:45 p.m. and 5:00 p.m., and between 5:45 p.m. and 6:00 p.m.
  - On weekends, workload reached a maximum of 63 percent of deployment between 5:15 p.m. and 5:30 p.m.

- All work:
  - Average total workload was 0.8 officers per hour during the week and 0.5 officers per hour on weekends.
  - This was approximately 73 percent of hourly deployment during the week and 57 percent of hourly deployment on weekends.
  - During the week, workload reached a maximum of maximum of 88 percent of deployment between 11:15 p.m. and 11:30 p.m.
  - On weekends, workload reached a maximum of 82 percent of deployment between 5:15 p.m. and 5:30 p.m.

APPENDIX A: CALL TYPE CLASSIFICATION

Call descriptions for the department's calls for service from January 1, 2018, to December 31, 2018, were classified into the following categories.

TABLE 8-26: Call Type, by Category

Call Type Code	Call Type	Table Category	Figure Category
1130	911 HANG UP	911 hang up	911 hang up
1130C	911 HANG UP CELL		
211PA	211 PANIC ALARM	Alarm	Alarm
211SL	211 SILENT ALARM		
459AL	459 AUDIBLE		
459SL	459 SILENT ALARM		
459SP	459 SPECIAL		
1199	Ofcr Needs Help	Assist other agency	Assist
AA	AGENCY ASSIST		
AA3	Code 3 AA		
AFD	ASSIST FD		
ALERT1	POSS AIR EMER		
ALERT2	PLANE W/MJR EMER		
BRUSH	BRUSH FIRE		
CPR	CPR IN PROG		
FD	CALLS TO F.D.		
HAZMAT	HAZARDOUS MATERI		
OD	OVERDOSE		
PLANE	PLANE CRASH		
SEWER	sewer callout		
STREET	STREET CALLOUT		
STRUC	STRUCTURE FIRE		
TRAIN	TRAIN ACCIDENT		
TREE	TREE CALL OUT		
VFIRE	VEH FIRE		
WATER	WATER CALL OUT		
1153	SECURITY CHECK	Check	Check
ATC	ATTEMPT CONTACT		
ATL	ATTEMPT LOCATE		
BAR	BAR CHECK		
BOL	BE ON LOOKOUT		
CKAREA	CHECK AREA		
DCC	DISTRICT CAR CK		
FU	Follow Up		
PARKS	Parks call out		
WELCK	WELFARE CHECK		
YANA	U R Not Alone		

Call Type Code	Call Type	Table Category	Figure Category
116	SHOTS FIRED	Crime–person	Crime
187	HOMICIDE		
211	211		
211A	211 ARMED		
211SA	211 STRONG ARM		
211SP	211 SPECIAL		
220	SEXUAL ASSAULT		
23110	THROW AT VEH		
240	ASSAULT		
242	BATTERY		
245	ASSAULT W/WPN		
246	shoot at building		
261	rape		
2735	SPOUSAL ABUSE		
273A	CHILD ABUSE/NEG		
314	INDECENT EXPOSUR		
417	BRANDISHING		
422	TERRORIST THREAT		
646	STALKING		
647B	PROSTITUTION		
653M	ANNOY PH CALL		
CIVIL	CIVIL DISP		
FP	Foot Pursuit		
GS	Gang Suppression		
HS	NARC ACTIVITY		
PWPN	PERSON W/WEAPON		
R207	RPT KIDNAP		
R211	RPT 211		
R211A	PHONE RPT		
R211SA	RPT 211 SA		
R215	RPT CARJACK		
R220	RPT ASSAULT RAPE		
R240	RPT ASSAULT		
R242	RPT BATTERY		
R243	SEXUAL BATTERY		
R245	RPT ADW		
R261	RPT RAPE		
R2735	RPT DV		
R273A	RPT CHILD ABUSE		
R288	RPT CHILD MOLEST		
R314	RPT INDECENT EXP		
R368	RPT ELDER ABUSE		

Call Type Code	Call Type	Table Category	Figure Category
R417	RPT BRANDISHING		
R422	RPT THREAT		
R646	RPT STALKING		
R647A	annoy child		
R653M	RPT ANNOY CALLS		
RTRO	RPT TRO VIOLATIO		
TRO	TRO VIOLATION		
10851	STOLEN VEHICLE		
10852	VEH TAMPERING		
451	ARSON		
459	459		
459C	459 COMMERCIAL		
459HP	459 HOT PROWL		
459R	459 RESIDENTIAL		
459V	459 VEHICLE		
470	FORGERY/FRAUD		
476	fraud		
487	GRAND THEFT		
488	PETTY THEFT		
490	SHOPLIFT		
496	POSS STOL PROP		
503	EMBEZZLEMENT		
537	DEFRAUD INNKEEPR		
594	VANDALISM		
594V	VANDALISM TO VEH	Crime–property	
602	TRESPASS		
DUMP	ILLEGAL DUMP		
MUNI	CODE VIOLATION		
R10851	AUTO THEFT		
R10852	VEH TAMPERING		
R451	RPT ARSON		
R459	RPT 459		
R459C	RPT 459 COMM		
R459R	RPT 459 RES		
R459S	RPT 459 SCHOOL		
R459V	RPT 459 VEH		
R470	RPT FRAUD/FORG		
R476	fraud		
R487	RPT GRAND THEFT		
R488	RPT PETTY THEFT		
R490	RPT SHOPLIFT		
R496	stolen property		

Call Type Code	Call Type	Table Category	Figure Category
R503	RPT EMBEZZLEMENT		
R530	RPT ID THEFT		
R537	RPT DEFRAUD INNK		
R594	RPT VANDALISM		
R594G	graffiti		
R594R	RPT VAND RES		
R594V	RPT VAND VEH		
R602	RPT TRESPASS		
RECOV	RECOVER 10851		
BIKE	bike patrol		
CODE5	STAKEOUT/CODE5		
DETAIL	SPECIAL DETAIL		
EVENT	Special Event		
EXTRAP	EXTRA PATROL		
FOOT	Foot Patrol	Directed patrol	Directed patrol
FPAT	Foot Patrol		
LAGOON	Lagoon Patrol		
MALL	Mall Patrol		
SWAT	SWAT CALL OUT		
TENT	tented house - needs extra patrol		
415	DISTURBANCE		
415C	415 CIVIL		
415D	415 DOG		
415FAM	415 FAMILY		
415FI	415 FIGHT		
415FW	415 FIREWORKS		
415GRP	415 GROUP		
415M	415 MUSIC		
415N	415 NOISE		
415P	415 PARTY	Disturbance	Disturbance
415V	415 VERBAL		
5150	5150		
647F	PUBLIC DRUNK		
PEACE	KEEP THE PEACE		
PERT	PERT RESPONSE		
R415	RPT DISTURBANCE		
RJ	RUNAWAY JUV		
SKATE	SKATERS		
597	CRUELTY TO ANIM		
ANIMAL	ANIMAL CALL	Animal	General noncriminal
BITE	ANIMAL BITE		
1021	CALL RP	Miscellaneous	

Call Type Code	Call Type	Table Category	Figure Category
CARS	crime analysis response		
ET	Evidence Tech		
HAZPLA	HAZARDOUS PLAY		
INFO	INFORMATION		
MISC	MISC CALL		
TARA	TARASOFF WARNING		
WARR	WARRANT SERVICE		
1089	bomb threat	Investigation	Investigation
1131	911 HELP CALL		
1144	CORONER'S CASE		
1145	ATTEMPT SUICIDE		
118	PERSON DOWN		
FOUND	FOUND PERSON		
FOUNDJ	FOUND JUVENILE		
FOURTH	FOURTH WAIVER		
FPROP	FOUND PROPERTY		
LPR	LPR hit		
LPROP	LOST PROPERTY		
MISA	MISSING ADULT		
MISJ	MISSING JUVENILE		
MISR	MISSING RETURNED		
1087	MEET	Out of service–administrative	Out of service
MEET	MEETING		
OC	Out of Car		
TRNING	Officer Training		
1151	Subject Stop	Public contact	Public contact
1188	CITIZEN ASSIST		
FLAG	Flag by Citizen		
PR	PUBLIC CONTACT		
SS	Subject Stop		
UNWANT	UNWANTED SUBJECT		
VEND	ILLEGAL VENDORS		
117	PROWLER	Suspicious incident	Suspicious incident
AVEH	ABAND VEH		
CKVEH	Check Vehicle		
R459HP	RPT 459HOT PROWL		
SUSC	SUSP CIRCUMSTANC		
SUSLET	suspicious letter		
SUSP	SUSP PERSON		
SUSPKG	SUSP PACKAGE		
SUSV	SUSP VEHICLE		
1180	INJURY ACCIDENT	Accident	Traffic

Call Type Code	Call Type	Table Category	Figure Category
1181	MINOR INJ ACC		
1182	NON INJ ACC		
1183	UNK INJ ACC		
20001	HIT&RUN W/INJURY		
20002	HIT&RUN NON INJ		
R1181	RPT TC MINOR INJ		
1150	Traf Stop Return	Traffic enforcement	
1184	Traffic Control		
23103	RECKLESS DRIVING		
23109	DRAG RACING		
23152	DUI		
ENFOR	Traf Enforcement		
FIXIT	TICKET SIGN OFF		
PARK	ILLEGAL PARKING		
R1182	RPT TC NONINJURY		
R20001	RPT H&R INJ		
R20002	RPT H&R		
R23103	ROAD RAGE		
SIGS	SIGNAL MAINTENCE		
T	Traffic Stop		
TCOMP	Traf Enforcement		
THAZ	TRAFFIC HAZARD		
TP	Traffic Pursuit		

APPENDIX B: UNIFORM CRIME REPORT INFORMATION

This section presents information obtained from Uniform Crime Reports (UCR) collected by the Federal Bureau of Investigation (FBI) California Department of Justice. The tables and figures include the most recent information that is publicly available at the national level. This includes crime reports for 2008 through 2017, along with clearance rates for 2017. Crime rates are expressed as incidents per 100,000 population.

TABLE 8-27: Reported Crime Rates in 2017, by City

City	State	Population	Crime Rates Violent	Crime Rates Property	Crime Rates Total
Buena Park	CA	83,552	349	3,368	3,717
Chula Vista	CA	271,109	298	1,432	1,730
Costa Mesa	CA	113,267	319	3,795	4,114
El Cajon	CA	104,447	411	2,231	2,642
Escondido	CA	152,845	377	1,704	2,081
Fullerton	CA	141,637	207	2,790	2,997
Hemet	CA	85,166	537	3,643	4,180
Indio	CA	90,055	710	2,540	3,250
Menifee	CA	90,403	136	2,181	2,317
Murrieta	CA	113,016	71	1,400	1,471
Newport Beach	CA	86,910	143	2,443	2,586
Orange	CA	141,130	154	1,831	1,985
Tustin	CA	81,246	162	2,399	2,561
Westminster	CA	91,863	306	3,075	3,381
Carlsbad	**CA**	**115,344**	**214**	**1,915**	**2,129**
California		**39,536,653**	**449**	**2,497**	**2,946**
National		**325,719,178**	**383**	**2,362**	**2,745**

FIGURE 8-38: Reported Violent and Property Crime Rates, by Year
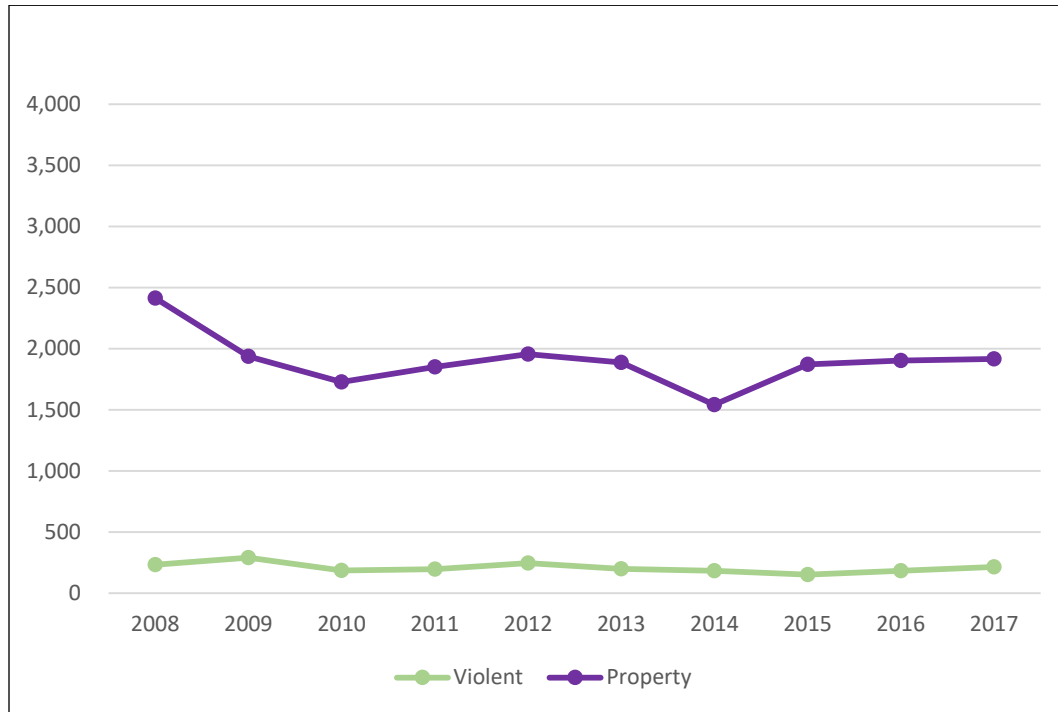

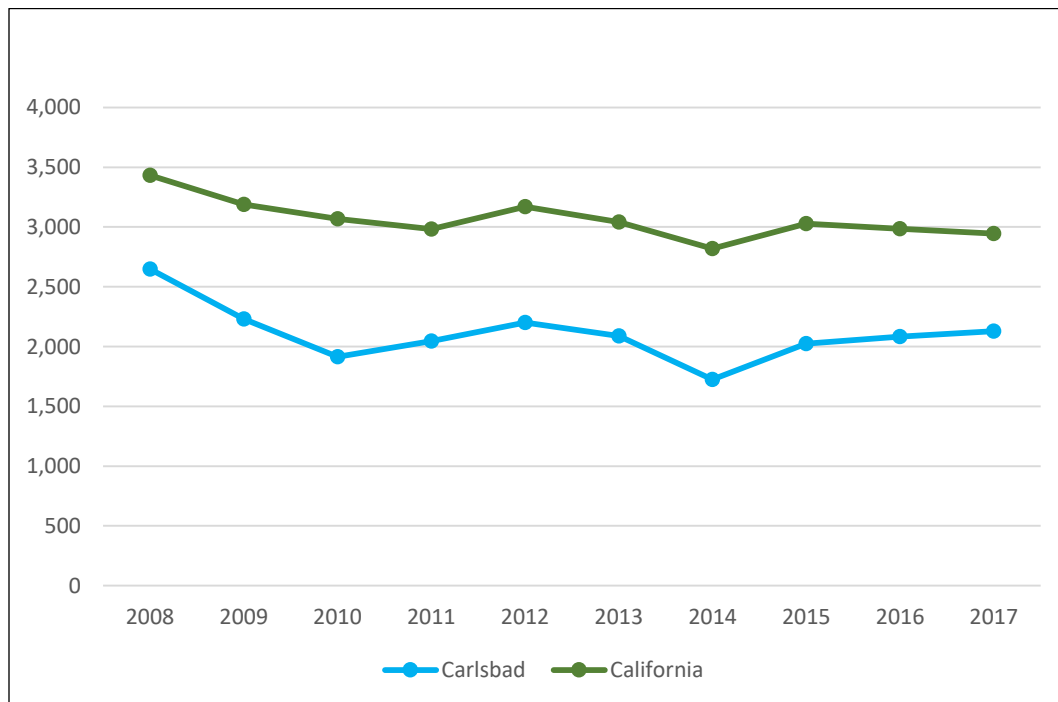**FIGURE 8-39: Reported City and State Crime Rates, by Year**

TABLE 8-28: Reported Carlsbad, California, and National Crime Rates, by Year

Year	Carlsbad				California				National			
	Population	Violent	Property	Total	Population	Violent	Property	Total	Population	Violent	Property	Total
2008	97,670	232	2,414	2,647	36,876,276	502	2,931	3,433	309,327,055	438	3,055	3,493
2009	98,482	291	1,937	2,229	37,061,435	471	2,717	3,188	312,367,926	416	2,906	3,322
2010	105,328	185	1,728	1,913	37,346,022	439	2,629	3,068	314,170,775	393	2,833	3,225
2011	106,566	197	1,849	2,046	37,819,249	410	2,574	2,983	317,186,963	376	2,800	3,176
2012	107,879	246	1,955	2,201	38,183,375	421	2,747	3,169	319,697,368	377	2,758	3,135
2013	110,505	200	1,887	2,087	38,498,377	394	2,646	3,041	321,947,240	362	2,627	2,989
2014	112,297	182	1,541	1,723	38,970,399	389	2,430	2,819	324,699,246	357	2,464	2,821
2015	113,972	151	1,872	2,023	39,315,550	424	2,605	3,029	327,455,769	368	2,376	2,744
2016	115,040	182	1,902	2,084	39,421,283	443	2,541	2,984	329,308,297	383	2,353	2,736
2017	115,344	214	1,915	2,129	39,536,653	449	2,49	2,946	325,719,178	383	2,362	2,745

TABLE 8-29: Reported Carlsbad, California, and National Crime Clearance Rates, 2017

Crime	Carlsbad			California			National		
	Crimes	Clearances	Rate	Crimes	Clearances	Rate	Crimes	Clearances*	Rate
Murder Manslaughter	0	0	NA	1,829	1,144	63%	15,657	9,645	62%
Rape	30	6	20%	14,724	5,427	37%	121,084	41,774	35%
Robbery	46	17	37%	56,609	17,324	31%	293,160	87,069	30%
Aggravated Assault	171	96	56%	105,391	56,227	53%	747,731	398,541	53%
Burglary	432	38	9%	176,638	18,871	11%	1,281,083	172,946	14%
Larceny	1,638	157	10%	641,804	69,636	11%	5,072,970	974,010	19%
Vehicle Theft	139	21	15%	168,327	15,336	9%	720,346	98,687	14%

Note: *Clearances were calculated from crimes and rates, as these numbers are not directly available from the FBI.