POLICE OPERATIONS & DATA ANALYSIS REPORT

EL MIRAGE POLICE DEPT. CITY OF EL MIRAGE, ARIZONA



CPSM®

CENTER FOR PUBLIC SAFETY MANAGEMENT, LLC 475 K STREET NW STE 702 • ARIZONA, DC 20001 WWW.CPSM.US • 716-969-1360



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

THE ASSOCIATION & THE COMPANY

The International City/County 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 over 341 such studies in 42 states and provinces and 246 communities ranging in population from 8,000 (Boone, Iowa) to 800,000 (Indianapolis, Ind.).

Thomas Wieczorek is the Director of the Center for Public Safety Management. Leonard Matarese serves as the Director of Research & Program Development. Dr. Dov Chelst is the Director of Quantitative Analysis.

CENTER FOR PUBLIC SAFETY MANAGEMENT PROJECT CONTRIBUTORS

Thomas J. Wieczorek, Director

Leonard A. Matarese, Director, Research & Project Development

Dov Chelst, Ph.D. Director of Quantitative Analysis

Shan Zhou, Data Analyst

Sarita Vasudevan, Data Analyst

Xianfeng Li, Data Analyst

James E. McCabe, Ph.D., Senior Public Safety Consultant – Team Leader

Robert Handy, Senior Public Safety Consultant

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

Dennis Kouba, Senior Editor

CONTENTS

Tables	vi
Figures	viii
Section 1. Executive Summary	
Recommendations	2
Prioritization of Recommendations	2
Operations Division	2
Administrative	4
Section 2. Methodology	7
Section 3. Community and Department Overview	8
Community	8
Demographics	8
Law Enforcement Services	8
Uniform Crime Report/Crime Trends	8
Section 4. Operations Division	13
Patrol Deployment, Staffing, and Scheduling	13
Deployment	13
Examining Calls for Service	21
Out-of-Service Time	23
Managing Calls For Service	24
Web-based or Deferred Response	29
CFS Efficiency	30
Schedule and Staffing	32
Schedule	32
Patrol Modifications	34
Staffing	40
Patrol Supervision – Officer-In-Charge (OIC) Model	41
Critical Service Areas	42
Community Engagement	42
Police Assistants	445
Technology on Patrol	44
Spatial Representation of Demand	47
Traffic Enforcement	54
Investigations Bureau	56
Schedule and Workload	56

Clearance Rates	58
Detective Training	59
Task Forces	60
Section 5 Administrative	62
Management and Strategic Planning	62
Fiscal Management	64
Professional Standards Unit (Internal Investigations)	65
Crime Analysis	8
Property and Evidence	69
Workload and Staffing	69
Property Intake	70
Security	70
Storage	71
Software and Tracking Systems	71
Communications	72
Intergovernmental Agreement for Dispatch Services	72
Staffing and Costs	72
APCO Audit	72
Work Load	74
Response Times	75
Options for Emergency Dispatch Services for El Mirage	77
Training	80
Recruit Training	80
Field Training	81
In-Service Training	82
Management Training/Executive Development	83
Facilities	84
Fleet Error! I	Bookmark not defined
Records	8888
Information Technology	90
Recruitment and Retention	92
Section 6. Conclusion	94
Section 7. Data Analysis	95
Workload Analysis	95
Noncall Activities	
Deployment	122
Response Times	132

	All Calls	133
	High-priority Calls	138
Αŗ	ppendix A: Call Type Classification	140
Ar	ppendix B: Uniform Crime Report Information	144

TABLES

TABLE 3-1: Reported Crime Rates in 2019 and 2020, by City	9
TABLE 3-2: Reported El Mirage, Arizona, and National Crime Rates, by Year	
TABLE 3-3: Reported El Mirage, Arizona, and National Crime Clearance Rates, 2020	12
TABLE 4-1: Summary of Workload and Deployment	20
TABLE 4-2: Calls for Service, Workload, and Category Rank, 2021	22
TABLE 4-3: Activities and Occupied Times by Description	24
TABLE 4-4: CFS Efficiency, El Mirage PD Compared to CPSM Studies Benchmarks	31
TABLE 4-5: Patrol Strength by Shift	
TABLE 4-6: 10-hour Shift Configuration	35
TABLE 4-7: 10-hour Shift Deployment	35
TABLE 4-8: 12-hour Shift Configuration	38
TABLE 4-9: 12-hour Shift Configuration with Community Response Teams	39
TABLE 4-10: Rotation with Days Off for 12-Hour Shift Schedule	39
TABLE 4-11: Hybrid Schedule with Both 10- and 12-Hour Shifts	40
TABLE 4-12: Current and Proposed Detective Staffing and Caseload	57
TABLE 4-13: Reported El Mirage, Arizona, and National Crime Clearance Rates, 2019	58
TABLE 4-14: Reported El Mirage, Arizona, and National Crime Clearance Rates, 2020	59
TABLE 5-1: El Mirage Police Department in Perspective	64
TABLE 5-2: Complaint Dispositions Used in the EMPD	65
TABLE 5-3: Dispositions of Internal Investigations, 2019 and 2020	66
TABLE 5-4: Use of Force Incidents, 2019 and 2020	67
TABLE 5-5: Use of Force by Type, 2019 and 2020	67
TABLE 5-6: Property and Evidence Activity, 2021	70
TABLE 5-7: Property Volume Processed in Property and Evidence	70
TABLE 5-8: Summary of Annual Costs for El Mirage Dispatch Contract	73
TABLE 5-9: CFS per Day by Category	75
TABLE 5-10: Average and 90th Percentile Response Times by Priority	76
TABLE 5-11: Estimate of Dispatch Center Costs	79
TABLE 7-1: Events per Day, by Initiator	97
TABLE 7-2: Events per Day, by Category	99
TABLE 7-3: Calls per Day, by Category	101
TABLE 7-4: Calls per Day, by Initiator and Months	102
TABLE 7-5: Calls per Day, by Category and Month	
TABLE 7-6: Primary Unit's Average Occupied Times, by Category and Initiator	106
TABLE 7-7: Average Number of Responding Units, by Initiator and Category	108
TABLE 7-8: Number of Responding Units, by Category, Community-initiated Calls	110
TABLE 7-9: Calls and Work Hours by Beat, per Day	
TABLE 7-10: Calls and Work Hours per Day, by Category, Winter 2021	113
TABLE 7-11: Calls and Work Hours per Day, by Category, Summer 2021	115

TABLE 7-12: Activities and Occupied Times by Description	. 117
TABLE 7-13: Activities per Day, by Month	. 118
TABLE 7-14: Activities per Day, by Day of Week	. 119
TABLE 7-15: Activities per Hour, by Hour of Day	. 121
TABLE 7-16: Average Response Time Components, by Category	. 135
TABLE 7-17: 90th Percentiles for Response Time Components, by Category	. 136
TABLE 7-18: Average Response Time Components, by Beat	. 137
TABLE 7-19: Average and 90th Percentile Response Times, by Priority	. 138
TABLE 7-20: Call Type, by Category	. 140
TABLE 7-21: Reported Crime Rates in 2019 and 2020, by City	. 144
TABLE 7-22: Reported El Mirage, Arizona, and National Crime Rates, by Year	. 146
TABLE 7-23: Reported El Mirage, Arizona, and National Crime Clearance Rates, 2019	. 147
TABLE 7-24: Reported El Mirage, Arizona, and National Crime Clearance Rates, 2020	. 147

FIGURES

FIGURE 3-1: Reported El Mirage Violent and Property Crime Rates, by Year	10
FIGURE 3-2: Reported El Mirage and State Overall Crime Rates, by Year	10
FIGURE 4-1: Deployment and Workload, Winter 2021, Weekdays	
FIGURE 4-2: Workload Percentage by Hour, Winter 2021, Weekdays	16
FIGURE 4-3: Deployment and Workload, Winter 2021, Weekends	
FIGURE 4-4: Workload Percentage by Hour, Winter 2021, Weekends	
FIGURE 4-5: Deployment and Workload, Summer 2021, Weekdays	
FIGURE 4-6: Workload Percentage by Hour, Summer 2021, Weekdays	18
FIGURE 4-7: Deployment and Workload, Summer 2021, Weekends	19
FIGURE 4-8: Workload Percentage by Hour, Summer 2021, Weekends	19
FIGURE 4-9: Spatial Representation of Crime Calls for Service (CFS)	50
FIGURE 4-10: Spatial Representation of Community-Initiated CFS	51
FIGURE 4-11: Spatial Representation of Motor Vehicle Accidents	52
FIGURE 4-12: Spatial Representation of Motor Vehicle STOPS	53
FIGURE 7-1: Percentage Events per Day, by Initiator	97
FIGURE 7-2: Percentage Events per Day, by Category	98
FIGURE 7-3: Percentage Calls per Day, by Category	100
FIGURE 7-4: Calls per Day, by Initiator and Month	
FIGURE 7-5: Calls per Day, by Category and Month	103
FIGURE 7-6: Primary Unit's Average Occupied Times, by Category and Initiator	105
FIGURE 7-7: Number of Responding Units, by Initiator and Category	107
FIGURE 7-8: Number of Responding Units, by Category, Community-initiated Calls	109
FIGURE 7-9: Percentage Calls and Work Hours, by Beat	1111
FIGURE 7-10: Percentage Calls and Work Hours, by Category, Winter 2021	112
FIGURE 7-11: Percentage Calls and Work Hours, by Category, Summer 2021	1143
FIGURE 7-12: Activities per Day, by Month	1188
FIGURE 7-13: Activities per Day, by Day of Week	119
FIGURE 7-14: Activities per Day, by Hour of Day	1200
FIGURE 7-15: Deployed Units, Weekdays, Winter 2021	1233
FIGURE 7-16: Deployed Units, Weekends, Winter 2021	123
FIGURE 7-17: Deployed Units, Weekdays, Summer 2021	124
FIGURE 7-18: Deployed Units, Weekends, Summer 2021	1244
FIGURE 7-19: Deployment and All Workload, Weekdays, Winter 2021	126
FIGURE 7-20: Deployment and All Workload, Weekends, Winter 2021	126
FIGURE 7-21: Deployment and All Workload, Weekdays, Summer 2021	127
FIGURE 7-22: Deployment and All Workload, Weekends, Summer 2021	127
FIGURE 7-23: Percentage of Workload, Weekdays, Winter 2021	129
FIGURE 7-24: Percentage of Workload, Weekends, Winter 2021	129
FIGURE 7-25: Percentage of Workload, Weekdays, Summer 2021	130

FIGURE 7-26: Percentage of Workload, Weekends, Summer 2021	. 1300
FIGURE 7-27: Average Response Times, by Hour of Day, Winter and Summer 2021	. 1333
FIGURE 7-28: Average Response Time by Category, Winter 2021	. 1344
FIGURE 7-29: Average Response Time by Category, Summer 2021	134
FIGURE 7-30: Average Response Time Components, by Beat	137
FIGURE 7-31: Average Response and Dispatch Processing Times for High-priority Calls, by Hou	ur 139
FIGURE 7-32: Reported El Mirage Violent and Property Crime Rates, by Year	145
FIGURE 7-33: Reported City and State Crime Rates, by Year	145

SECTION 1. EXECUTIVE SUMMARY

The Center for Public Safety Management, LLC (CPSM) was commissioned to review the operations of the El Mirage Police Department. While our analysis covered all aspects of the department's operations, particular areas of focus of this study were identifying appropriate staffing of the department given the workload, community demographics, and crime levels; the effectiveness of the organizational structure; and efficiency and effectiveness of division/unit processes.

We analyzed the department workload 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, focus groups with line-level department personnel, on-site observations of the job environment, data analysis, comparative analysis, and the development of alternatives and recommendations.

Based upon CPSM's detailed assessment of the El Mirage Police Department, it is our conclusion that the department, overall, provides quality law enforcement services. The staff is professional and dedicated to the mission of the department. Throughout this report, we will strive to allow the reader to take a look inside the department to understand its strengths and its challenges. We sincerely hope that all parties utilize the information and recommendations contained herein in a constructive manner to make a fine law enforcement agency even better.

In this Executive Summary we present a master list of recommendations for consideration; we believe they will enhance organizational effectiveness. Some of these recommendations involve the creation of new job classifications. Others involve the reassignment/re-purposing of job duties to other sections or units. Oftentimes, these types of recommendations require a substantial financial commitment on the part of a jurisdiction. It is important to note that in this report we will examine specific sections and units of the department, and will offer a detailed discussion of our observations and recommendations for each.

The list of recommendations is extensive. Should the El Mirage Police Department choose to implement any or all recommendations, it must be recognized that this process is a long-term proposition, and implementation of some recommendations could take a year or more. The recommendations are intended to form the basis of a long-term improvement plan as the city and department. We must emphasize that this list of recommendations, though lengthy, is common in our operational assessments of agencies around the country. The number of recommendations should in no way be interpreted as an indictment of what we consider to be a fine department. As well, the leadership in the department is striving to create an environment in which constructive change can thrive.

The recommendations are grouped by operational category (patrol, detectives, etc.) and include our suggestion for which recommendations have a higher priority for implementation. Recommendations labeled as HIGH are those CPSM believes require immediate attention. Those labeled MEDIUM should be considered within the next year, and the ones labeled LOW can be considered for development and implementation in more than a year.

CPSM staff would like to thank Chief of Police Paul Marzocca and the entire staff of the El Mirage Police Department for their gracious cooperation and assistance in completing this project.

RECOMMENDATIONS

Prioritization of Recommendations

HIGH Should be addressed immediately.

MEDIUM Should be explored for development within one year.

LOW Can be considered for development in one year or more.

Operations Division

Calls for Service Management

1. Create a Calls-For-Service (CFS) working group to explore potential ways of eliminating workload demands and non-emergency CFS from patrol workload. (See pp. 24-29.) [Priority: HIGH]

Schedule and Staffing

- 2. Empanel a Shift Review committee to explore the options as presented by CPSM and determine which, if any, are suitable for use in the EMPD. (See pp. 32-41.) [Priority: HIGH]
- 3. CPSM's recommendation is that the EMPD implement Option 3, 12-Hour Shift with a Community Response Team This would entail staffing patrol using six, 12-hour shifts with personnel deployed as shown in Tables 4-10 and 4-11. This plan will result in patrol staffing of 2 lieutenants, 6 sergeants, and 28 police officers. (See pp. 34-41.) [Priority: HIGH]

Patrol Supervision

4. Discontinue the Officer-in-Charge model of patrol supervision and require personnel in the rank of sergeant or above to supervise patrol operations at all times. (See p. 41.) [Priority: HIGH]

Community Engagement

- 5. Develop a comprehensive Community Engagement Strategy:
 - (a) Design and host a Citizen's Police Academy. (See pp. 42-43.) [Priority: LOW]
 - □ (b) Design and host a People's Police Academy. (See pp. 42-43.) [Priority: LOW]
 - (c) Develop a Police Community Liaison Program. (See p. 42-43.) [Priority: LOW]
 - (d) Develop a robust system to solicit community feedback:
 - Administer a periodic community satisfaction survey. (See p. 44.) [Priority: LOW]
 - Develop a community notification protocol to keep stakeholders informed on police incidents of importance. (See p. 44.) [Priority: LOW]
- 6. Employ a greater use of technology to enhance police operations:
 - □ (a) Develop a robust web-based reporting system for the community to report minor incidents on the EMPD website. (See p. 45.) [Priority: LOW]
 - □ (b) Develop a deferred reporting system. (See p. 45.) [Priority: LOW]
 - (c) Explore best practices in police use of social media and expand the current social media program in the department. (See p. 45.) [Priority: MEDIUM]

7. Staff patrol shifts with Police Assistants (PAs) to assist with patrol operations. The number of PAs needed will be determined by the shift plan adopted by the EMPD. Under the current model, four PAs should be deployed, that is, one per squad. (See p. 44.) [Priority: MEDIUM]

Technology on Patrol

- 8. Deploy Automated External Defibrillator (AED)s in as many police vehicles as feasible; ideally all marked police vehicle should be equipped with an AED at all times. (See p. 45.) [Priority: HIGH]
- 9. Deploy License Plate Readers (LPRs) and Closed-Circuit Television (CCTV) at strategic and hot-spot locations in the city. (See p. 46.) [Priority: LOW]
- 10. Develop a system for independent review of body-worn cameras (BWC) recordings as the basis for developing deeper understanding of the police by the public and community groups. (See pp. 46-47.) [Priority: LOW]

Strategic Operations

11. Develop a strategic approach to community problems based on crime, traffic, and CFS data. (Recommendation No. 11.) (See pp. 47.) [Priority: MEDIUM]

Traffic Enforcement

- 12. Develop a Traffic Safety Plan. (See pp. 54-55.) [Priority: MEDIUM]
- 13. Employ the Three E's of traffic safety throughout the department. (See pp. 54-55.) [Priority: LOW]
- 14. Minimize focus on random and routine traffic enforcement. (See pp. 54-55.) [Priority: LOW]

Investigations Bureau

- 15. Provide training and technical support for the sergeant and lieutenant to better utilize available automated tools in the RMS system to assist in the supervision of the case management process. (See p. 56.) [Priority: MEDIUM]
- 16. Develop Standard Operating Procedures (SOPs) or a Bureau Manual to standardize operations and increase efficiency and accountability. The guidelines would standardize case assignments, case management, training, and other procedures. (See p. 56.) [Priority: LOW]
- 17. Add one full-time detective to the Bureau to reduce the current caseload of the four sworn detectives assigned. (See p. 57.) [Priority: HIGH]
- 18. Add a full-time civilian investigator to manage seizure and analysis of digital evidence. (See p. 57.) [Priority: HIGH]
- 19. Explore the addition of contract investigators to work the older "cold" cases that have workable leads. (See pp. 57-58.) [Priority: HIGH]
- 20. Utilize the Records Management System (RMS) case management system to track individual detective caseloads and clearance rates. (See p. 58.) [Priority: MEDIUM]
- 21. Research other law enforcement agency detective training programs and develop a formal detective training process. (See p. 59.) [Priority; LOW]
- 22. Develop investigative specialties within the detective ranks. With the current workload of EMPD detectives, they cannot each possibly develop expertise for investigating all types of



- serious crimes. Homicides, sexual assaults, domestic violence, and other crimes require targeted training and experience, which is impossible to develop while working 25 open cases a month. (See p. 59.) [Priority: LOW]
- 23. Implement a program to rotate patrol officers in and out of detectives on a periodic basis. (See p. 60.) [Priority: LOW]

Administrative

Strategic Planning

- 24. Develop a comprehensive, multiyear strategic plan for the department. (See pp. 62-63.) [Priority: LOW]
- 25. Continue to prepare and publish comprehensive annual reports. (See pp. 62-63.) [Priority: LOW]
- 26. Seek and obtain accreditation from the Arizona Law Enforcement Accreditation Program (ALEAP). (See pp. 62-63.) [Priority: LOW]

Professional Standards

- 27. Create a system for tracking supervisory inquiries made by citizens. (See p. 66.) [Priority: MEDIUM]
- 28. Evaluate available software systems for tracking public complaints, personnel investigations, and uses of force. (See pp. 67-68.) [Priority: LOW]
- 29. Devise a formal process for an annual evaluation of all risk management data, including pursuits, uses of force, traffic accidents, and other incidents that may incur liability for the City of El Mirage. This review should specifically focus on identifying possible training and policy needs or improvements and be reviewed by the command staff. (See pp. 67-68.) [Priority: LOW]

Property and Evidence

- 30. As soon as practical, add a full-time Property and Evidence Technician. (See pp. 69-70.) [Priority: HIGH]
- 31. Install a first aid kit in the property packaging area. (See p. 70.) [Priority: HIGH]
- 32. Evaluate the feasibility of installing an eyewash station in the property packaging area. (See p. 70.) [Priority: HIGH]
- 33. Begin the planning process to budget for moveable shelving inside the property evidence warehouse in order to provide more storage space. (See p. 71.) [Priority: LOW]
- 34. Develop a plan to modify the property warehouse to relocate the drug storage area to increase capacity. (See p. 71.) [Priority: MEDIUM]
- 35. Evaluate options for expanding the secure vehicle storage area in the back parking lot of the police station to provide for the safe storage of all vehicles the department takes into its possession. (See p. 71.) [Priority: MEDIUM]

Communications

36. CPSM recommends EMPD command staff resume face-to-face meetings with the dispatch team and command staff from Tolleson PD. (See pp. 73-74.) [Priority: HIGH]

- 37. Ensure a Tolleson PD communications supervisor regularly attends El Mirage command staff meetings to help improve the relationship and overall communication between the two agencies. (See p. 74.) [Priority: HIGH]
- 38. Based on the Association of Public-Safety Communication Officials (APCOA) assessment of Tolleson dispatch CPSM recommends the following actions.
 - (a) EMPD staff should work with Tolleson to improve the use of proper codes, plain language, and call signs by EMPD officers. (See pp. 74-76.) [Priority: HIGH]
 - □ (b) EMPD should ensure Tolleson dispatch works to improve the call dispatching time for Priority 1 emergency calls. (See pp. 74-76.) [Priority: HIGH]
 - (c) EMPD should explore ways to partner with Tolleson PD to improve recruitment and retention of Tolleson dispatchers (to dispatch for El Mirage). For example, the two agencies could partner on social media advertisements, awareness campaigns, and the benefits of being a dispatcher. (See pp. 74-76.) [Priority: HIGH]
- 39. Of the options presented for dispatching services, CPSM recommends Option 2, and that is for the EMPD to continue contracting with the Tolleson PD for dispatch services while working to improve the working relationship between the agencies. (See pp. 77-79.) [Priority: HIGH]

Training

- 40. Create a new position of Training sergeant to be responsible for developing, scheduling, coordinating, and delivering training within the department. The newly-designated Training sergeant should work to enhance the current program of field training for newly-appointed sergeants. This individual could also take primary responsibility for the review and revision of the EMPD's SOPs. (See p. 80.) [Priority: LOW]
- 41. The department should develop a multiyear training plan. This training plan should identify specific training goals and objectives for all units, and all sworn and nonsworn members of the department, and should be incorporated into the department's newly created overall multiyear strategic plan. The department's Training sergeant would be chiefly responsible for developing, reviewing, and revising the training plan as necessary. (See p. 80.) [Priority: LOW]
- 42. Develop tactical training in de-escalation techniques and judgmental use of force for police officers. (See pp. 82-83.) [Priority: MEDIUM]
- 43. The department should encourage and actively support members of the department to apply to the FBI National Academy and other executive management training programs. (See p. 83.) [Priority: LOW]

Records

44. In-service training should include a regularly scheduled training session regarding proper field reporting and NIBRS coding. The Records supervisor should deliver this training. (See pp. 88-89.) [Priority: HIGH]

Information Technology

45. Technology needs for American police departments are evolving and expanding rapidly. The city should consider assigning a dedicated IT professional to the EMPD. This individual would have a comprehensive understanding of the department's various systems and needs and would be charged with identifying, installing, and maintaining hardware and software for such technologies as body-worn cameras, drones, license plate readers (LPRs), etc. (See pp. 89-90.) [Priority: HIGH]



- 46. In order to justify a full- or even part-time in-house IT position, this individual could also be charged with making approved revisions and distributing SOPs and related on-line training materials throughout the department. (See pp. 89-90.) [Priority: LOW]
- 47. The department should establish an internal technology taskforce. This body should be comprised of supervisors, line officers, an IT professional assigned to the department, and civilian members of the department. It should meet regularly, and should: 1) identify the department's current technology needs; 2) field test, evaluate and select new equipment, software and technologies; 3) identify any deficiencies in the department's current communications (CAD), records management (RMS) or other data systems; 4) periodically revise and update the department's website; 5) identify technology training needs, recommend and develop additional training; and 6) make specific recommendations for improvement, where necessary. This task force would report to the Deputy Director. (See pp. 89-90.) [Priority: MEDIUM]
- 48. The technology task force should develop a formal long-term replacement plan for all of the department's IT equipment and software. (See pp. 89-90.) [Priority: LOW]

Recruitment and Retention

- 49. The department should record and consistently monitor its application yield rate and perform comparisons from year to year. This information, combined with accurate data concerning the number of police applicants each year, can provide meaningful data that will speak to the department's relative degree of success in attracting and securing qualified police officers. (See p. 91.) [Priority: LOW]
- 50. As part of its overall recruitment plan, the department should develop and/or strengthen relationships with colleges and universities that offer degrees in criminal justice and public administration. (See p. 91.) [Priority: LOW]

SECTION 2. METHODOLOGY

Data Analysis

CPSM used numerous sources of data to support our conclusions and recommendations for the El Mirage 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).

Interviews

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

Focus Groups

A focus group is an unstructured group interview in which the moderator actively encourages discussion among participants. Focus groups generally consist of eight to ten participants and are used to explore issues that are difficult to define. Group discussion permits greater exploration of topics. For the purposes of this study, focus groups were held with a representative cross-section of employees within the department.

Document Review

CPSM consultants were furnished with numerous reports and summary documents by the El Mirage 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.

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. That is the case in this study as well. In the following subsections, we will examine 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. COMMUNITY AND DEPARTMENT OVERVIEW

COMMUNITY

The City of El Mirage is located within the northwestern part of the Phoenix metropolitan area. The city borders the Agua Fria River and is considered the gateway to the northwest valley. According to U.S. Census estimated, the population of the city in 2020 was approximately 35,800. El Mirage has experienced significant population growth over the past 20 years.

Demographics

The City of El Mirage is a heterogeneous community; its population is 74.8 percent White, 9.6 percent African-American, 1.1 percent Native American, 1.7 percent Asian, 4.2 percent two or more races, with 47.2 percent of the population reporting to be Hispanic or Latino. 81.9 percent of its citizens possess a high school diploma, while 15.3 percent possess a bachelor's degree or higher.

The owner-occupied housing rate is 63.7 percent for the city, while the rental-occupied housing rate is 36.3 percent. The average persons per household rate for the city is 3.35 compared to 2.68 statewide. The median household income is \$58,216 for the city, compared to \$58,945 for the State of Arizona. Persons living in poverty make up 15.3 percent of the city's population, compared to 12.8 percent for the State of Arizona. The median home price in the City of El Mirage is \$160,800.

LAW ENFORCEMENT SERVICES

The El Mirage Police Department provides a full range of law enforcement services, excluding custody operations. The department also does not provide its own emergency call-taking and dispatch, rather, it relies on the City of Tolleson for these services.

Uniform Crime Report/Crime Trends

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 El Mirage measure against those of other local Arizona agencies as well as the State of Arizona 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. For 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 (2020).



When comparing El Mirage Police Department data with other Arizona cities, one can see El Mirage reports a violent crime rate in the mid-range of comparable cities, but a higher property crime rate. El Mirage has a lower violent crime rate than the U.S. or Arizona rates, and as of 2020, a property crime rate comparable to Arizona's but higher than the country as a whole.

TABLE 3-1: Reported Crime Rates in 2019 and 2020, by City

			2019			2020				
Municipality	State	Domilakan	Crime Rates			Domilation	C	Crime Rates		
		Population	Violent	Property	Total	Population	Violent	Property	Total	
Apache Junction	ΑZ	42,531	226	1,763	1,989	43,385	214	1,775	1,989	
Casa Grande	ΑZ	58,366	469	2,289	2,758	59,822	565	2,006	2,571	
Maricopa	ΑZ	50,881	167	1,187	1,354	53,165	126	1,157	1,283	
Oro Valley	ΑZ	45,970	48	1,279	1,327	46,634	58	1,199	1,257	
Payson	ΑZ	15,760	374	1,827	2,202	15,869	630	2,092	2,722	
Prescott	ΑZ	43,781	489	1,562	2,051	44,835	375	1,465	1,840	
El Mirage	ΑZ	36,185	232	2,714	2,946	36,221	293	2,217	2,510	
Arizona		7,278,717	455	2,441	2,896	7,359,580	485	2,228	2,713	
National		328,239,523	379	2,010	2,489	331,449,281	399	1,958	2,357	

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

The following figure illustrates the trends in Part 1 crime (violent and property) in El Mirage over the past ten years. It shows that violent crime rate remained somewhat constant from 2011 to 2020. The property crime rate hit a high point in 2013 but has since declined to its lowest point over this period in 2020.

4,000 3,500 3,000 2,500 2,000 1,500 1,000 500 0 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 Violent Property

FIGURE 3-1: Reported El Mirage Violent and Property Crime Rates, by Year

The following figure shows that since 2011 the State of Arizona has seen a slow, progressive drop in overall crime rate. The City of El Mirage did not follow the same consistency but has ended up with a slightly lower overall rate than Arizona at the end of this period.

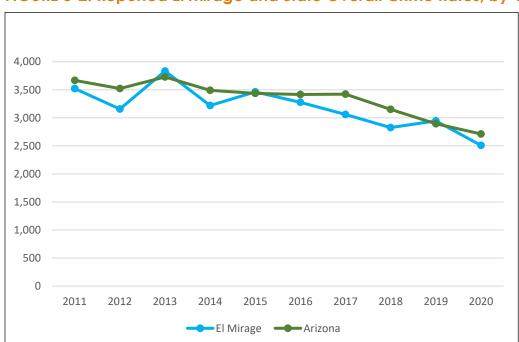


FIGURE 3-2: Reported El Mirage and State Overall Crime Rates, by Year

The following table compares El Mirage crime rates to both the state and national rates year by year for the period 2011 through 2020. Again, this data is indexed per 100,000 population. It is provided for illustration purposes only.

TABLE 3-2: Reported El Mirage, Arizona, and National Crime Rates, by Year

Year		El Mirc	age		Arizona				National				
rear	Population	Violent	Property	Total	Population	Violent	Property	Total	Population	Violent	Property	Total	
2011	32,247	295	3,228	3,523	6,501,532	411	3,257	3,668	317,186,963	376	2,800	3,176	
2012	32,685	263	2,894	3,157	6,572,455	422	3,102	3,523	319,697,368	377	2,758	3,135	
2013	32,837	262	3,572	3,834	6,646,289	398	3,331	3,729	321,947,240	362	2,627	2,989	
2014	33,307	171	3,047	3,219	6,751,280	383	3,108	3,491	324,699,246	357	2,464	2,821	
2015	33,985	238	3,225	3,463	6,848,298	437	3,000	3,437	327,455,769	368	2,376	2,744	
2016	34,376	215	3,060	3,276	6,951,468	458	2,959	3,417	329,308,297	383	2,353	2,736	
2017	35,611	239	2,822	3,061	7,016,270	508	2,915	3,423	325,719,178	383	2,362	2,745	
2018	35,733	215	2,611	2,826	7,171,646	475	2,677	3,152	327,167,434	369	2,200	2,568	
2019	36,185	232	2,714	2,946	7,278,717	455	2,441	2,896	328,239,523	379	2,010	2,489	
2020	36,221	293	2,217	2,510	7,359,580	485	2,228	2,713	331,449,281	399	1,958	2,357	

The next table compares El Mirage's crime clearance rates to the state and national averages. These clearance rates are based upon the department's reporting of the UCR.

TABLE 3-3: Reported El Mirage, Arizona, and National Crime Clearance Rates, 2020

Crime	El Mirage				Arizona		National			
Crime	Crimes	Clearances	Rate	Crimes	Clearances	Rate	Crimes	Clearances*	Rate	
Murder Manslaughter	4	2	50%	432	292	69%	18,109	9,851	54%	
Rape	25	5	20%	2,838	371	13%	110,095	33,689	31%	
Robbery	11	3	27%	5,739	1,511	26%	209,643	60,377	29%	
Aggravated Assault	66	43	65%	19,751	8,112	41%	799,678	371,051	46%	
Burglary	131	14	11%	21,390	2,744	13%	898,176	125,745	14%	
Larceny	579	162	28%	111,631	19,281	17%	4,004,124	604,623	15%	
Vehicle Theft	4	2	50%	15,806	2,074	13%	727,045	89,427	12%	

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

SECTION 4. OPERATIONS DIVISION

In this section we will examine the various elements of the Operations Division. This Division is responsible for responding to calls for service (CFS) from the public, providing police service to the community through uniformed patrol, and investigating criminal offenses in the community, both reactive to reported crimes, and proactive as a means of preventing crimes from occurring. It is the largest division in the department in terms of personnel and provides what the public would consider the "meat and potatoes" of policing services.

The first part of the discussion focuses on patrol operations. Our goal is to determine appropriate staffing for this critical service and then to provide an assessment of how these resources are deployed (what they do) and offer recommendations identifying any opportunities for improvement.

CPSM looks at patrol staffing in terms of workload. How many officers are needed to meet the service demands of the public? In order to determine this CPSM extracted data from the department's computer-aided dispatch (CAD) system, which tracks the data associated with calls for service handled by officers on patrol.

The first step is to model the workload. Once there is an understanding of the workload relative to the officers assigned to handle it, then a discussion can proceed on how to meet this demand most effectively. The following sections are related to this critical area.

PATROL DEPLOYMENT, STAFFING, AND SCHEDULING

Uniformed patrol is considered the "backbone" of American policing. The Bureau of Justice Statistics indicates that more than 95 percent of police departments in the U.S. in the same size category as the El Mirage Police Department provide uniformed patrol. 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 allocation of these resources is critical in order to have officers available to respond to calls for service and provide law enforcement services to the public.

Deployment

Staffing decisions, particularly for patrol, must be based on actual workload. Once the actual workload is determined then staffing decisions can be made consistent with the department's policing philosophy and the community's ability to fund it. The EMPD is a full-service police department and its philosophy is to address essentially all requests for service in a community style of policing. 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 the identification of activities that are really "calls" from those activities that are some other type of event.

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 time spent to provide services.

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 is a reflection of the extent that 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.

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 this 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, as of March 1, 2022, patrol was staffed by 42 sworn police officers (2 lieutenants, 6 sergeants, 30 police officers). These 42 of the 58 sworn officers represent 72.4 percent of the sworn officers in the EMPD. Accordingly, based on the Rule of 60, there are too many officers assigned to patrol compared to total sworn personnel. In order to bring the personnel allocation into balance there should be an addition of officers to non-patrol assignments and/or a reduction of personnel on patrol. However, such a reduction is not feasible. Under usual circumstances, having 72.4 percent of sworn personnel assigned to patrol would indicate a misallocation of resources. However, as other areas of this report will illustrate, the EMPD does an excellent job staffing administrative and support positions with civilian personnel, much better in fact than most police departments in the U.S. The effective use of

^{1.} The authorized personnel headcount of the EMPD is 58 sworn officers. At the time of the site visit only 54 officers were employed; there were two vacancies and two officers were on long-term leave.



civilian professionals by the department skews the patrol allocation percentage here, therefore indicating that caution must be used interpreting this data point.

This part of the "rule" is not hard-and-fast. Taken on its face, however, this part of the "rule" must be considered when examining the operational elements of the department when staffing recommendations are taken into consideration.

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

It is CPSM's contention that patrol staffing is optimally deployed when the SI is in 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 much lower than 60 percent, however, indicate patrol resources that are underutilized, and signals 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 and specific times during the day, then decisions should be made to reallocate or realign personnel to reduce the SI to levels below 60. This 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 CPSM data analysis in the second part of this report provides a rich overview of CFS and staffing demands experienced by the department. The analysis here looks specifically at patrol deployment and how to maximize the personnel resources of the department to meet the demands created by calls for service while also engaging in proactive policing to combat crime, disorder, and traffic issues in the community.

The following eight figures depict workload, staffing, and the "saturation" of patrol resources during the seasons on which we focused our workload analysis. By "saturation" we mean the amount of time officers spend on patrol handling service demands from the community. In other words, how much of the day is "saturated" with workload demands. This "saturation" is the comparison of workload with available manpower over the course of an average day during the months selected. The figures represent the manpower and demand during weekdays and weekends during two periods—winter and summer—in 2021. Examination of these figures permits exploration of the second part of the Rule of 60. Again, the Rule of 60 examines the relationship between total work and total patrol, and to comply with this rule, total work should be less than 60 percent of total patrol.

FIGURE 4-1: Deployment and Workload, Winter 2021, Weekdays

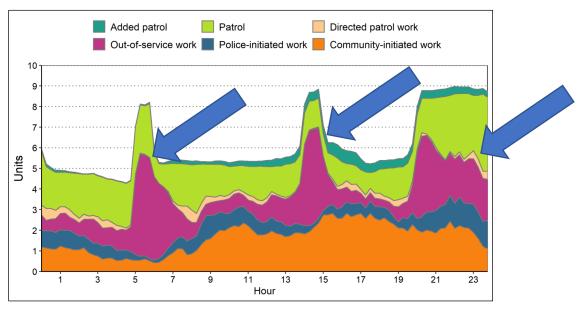
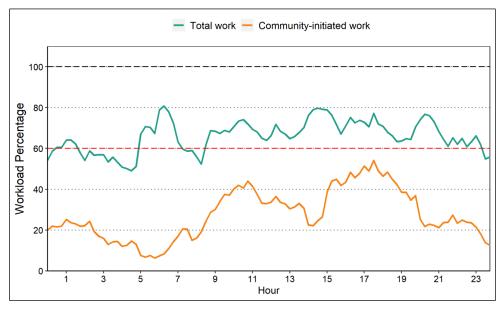


FIGURE 4-2: Workload Percentage by Hour, Winter 2021, Weekdays



Workload v. Deployment – Weekdays, Winter

Avg. Deployment: 6.2 officers per hour Avg. Workload: 4.1 officers per hour

Avg. % Deployed (SI): 67 percent Peak SI: 82 percent Peak SI Time: 6:15 a.m.

FIGURE 4-3: Deployment and Workload, Winter 2021, Weekends

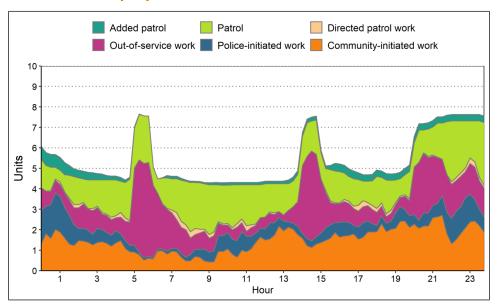
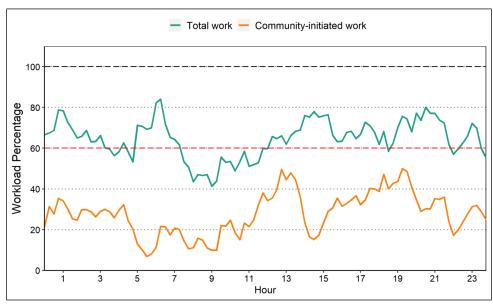


FIGURE 4-4: Workload Percentage by Hour, Winter 2021, Weekends



Workload v. Deployment – Weekends, Winter

Avg. Deployment: 5.4 officers per hour Avg. Workload: 3.6 officers per hour

Avg. % Deployed (SI): 66 percent Peak SI: 84 percent Peak SI Time: 6:15 a.m.

FIGURE 4-5: Deployment and Workload, Summer 2021, Weekdays

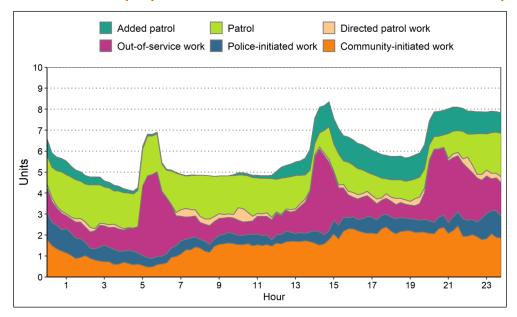
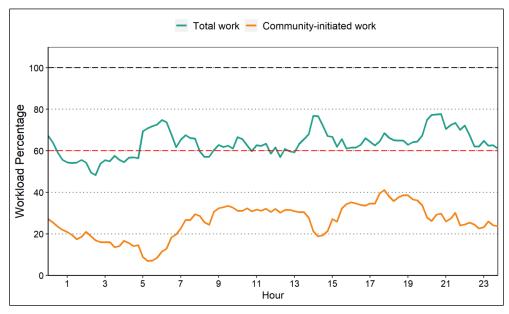


FIGURE 4-6: Workload Percentage by Hour, Summer 2021, Weekdays



Workload vs. Deployment – Weekdays, Summer

Avg. Deployment: 5.9 officers per hour Avg. Workload: 3.8 officers per hour

Avg. % Deployed (SI): 65 percent Peak SI: 78 percent Peak SI Time: 8:15 p.m.

FIGURE 4-7: Deployment and Workload, Summer 2021, Weekends

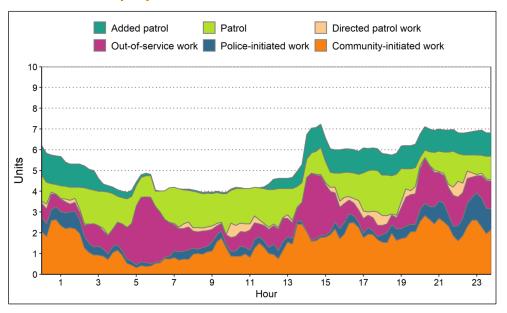
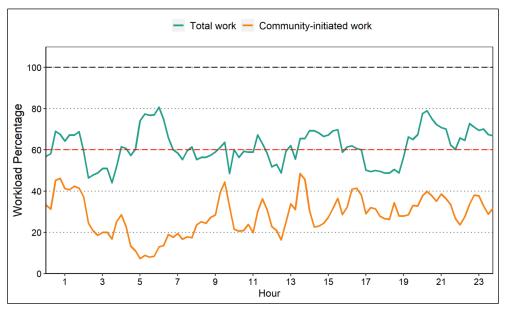


FIGURE 4-8: Workload Percentage by Hour, Summer 2021, Weekends



Workload v. Deployment – Weekends, Summer

Avg. Deployment: 5.3 officers per hour 3.3 officers per hour Avg. Workload:

Avg. % Deployed (SI): 62 percent Peak SI: 81 percent Peak SI Time: 6:00 a.m.

The following table summarizes the workload and deployment in the four periods observed:

TABLE 4-1: Summary of Workload and Deployment

	Winter Weekdays	Winter Weekends	Summer Weekdays	Summer Weekends
Avg. Officers Deployed:	6.2	5.4	5.9	5.3
Avg. Workload (No. of Officers Occupied):	4.1	3.6	3.8	3.3
Avg. % Deployed (SI):	67%	66%	65%	62%
Peak SI:	81%	84%	76%	81%
Peak SI Time:	6:15 a.m.	6:15 a.m.	8:15 p.m.	6:00 p.m.

The information in the eight figures reveals several important findings and leads to subsequent recommendations about the workload demands and patrol function in the EMPD.

CPSM recommends that the 60 threshold not be breached for extended lengths of time in a 24hour period. This is because when workload gets too high officers have a tendency to shift their focus from being proactive to being reactive. They do this because they want to be available for calls as they come in from the public, respond to emergencies, and be available to back-up their fellow officers. If service demands from work get high, officers will not seek out self-initiated activities that would occupy their time because they feel they need to be available for other things that might be coming their way.

If the EMPD wants to leverage the patrol function to commit to a strategic approach to issues, engage in crime prevention, traffic enforcement, community engagement, etc. it will fail because officers on patrol will not have the time. While it might appear that they have about 40 percent of their time on patrol available, they will not engage in proactive work because they will want to remain available to perform their primary function of responding to CFS. Essentially, with the saturation index at the levels reported here, the patrol function is onedimensional. The focus is on CFS; other strategic priorities will have limited success getting implemented.

The workload demands from the El Mirage community present a typical daily distribution in policing. Call volume is low in the early morning hours and increases throughout the day, then peaks in the evening. The supply of officers also fits an expected pattern consistent with the three 10-hour shifts configured as they are in El Mirage. Workload, as represented by the Saturation Index, however, is very high. In all time periods examined by CPSM, the average workload as a percentage of staffing exceeds the acceptable threshold for effective patrol operations. The table above indicates that the average workload saturation exceeds the acceptable threshold in all periods, and there are times when the saturation index jumps into the 80 percent range. Indexes at these levels suggest that the patrol function is overstressed and steps need to be taken to lower the workload demands on officers on patrol.

In order to address this situation there are three "levers" that should be considered. First, workload itself must be examined. What kinds of calls are the officers handling, can they be reduced, are there other mechanisms the department can take to minimize service demands placed on the officers?

The second step would be to examine shift schedules. Are the schedules designed in a way that puts the needed number of officers in the field during the times when they are needed the

most? Oftentimes an adjustment in the schedule can better align the supply of personnel and the demand for their services.

The last step, after exhausting the first two, is to add personnel to patrol. When workload is too high officers often resist proactive patrol, service quality to reactive CFS suffers, and the general negative outcomes of overwork and burnout manifest themselves in the department.

All three of these steps are considered in the following analysis.

EXAMINING CALLS FOR SERVICE

The EMPD approaches service demands from the perspective that all CFS, no matter how minor, will receive a response from an officer. We learned that reported traffic crashes, even minor "fender-benders," get a full investigation by EMPD officers. CPSM takes the position that the majority of these crashes do not even warrant a response by the police, but in El Mirage they result in full investigations. This requires a commitment of time, a commitment that manifests itself in high levels of out-of-service time to support these responses.

It was reported to the CPSM team that no call is considered too minor to warrant a response and no case is too small to warrant an investigation. The result of this policing philosophy is the delivery of comprehensive policing services to the community. The department has the hallmark of a small-town approach to policing, in which people are not just anonymous citizens but valued individuals of the community. Service is personalized, the police are part of the fabric of the community, and expectations for police service are high.

This approach is not without costs, however. Considerable resources are needed to maintain the small-town approach. In essence, patrol must be staffed with enough officers to respond to any call.

When examining options for the department's direction, the city and the department face the choices of a) continue to police the community as they do now, or b) take steps to restructure how to respond to demand, still promote order and safety, but free up additional time for officers to engage in proactive patrol and community engagement. That is, the department must decide whether to sustain its comprehensive level of police service or take the steps necessary to manage public demand. Essentially, this is a political decision regarding the quantity of police services offered to the El Mirage community. But quality doesn't need to suffer. The recommendations offered regarding operations, if implemented, will permit the EMPD to continue its full-service model of policing yet run the agency more efficiently.

The following table presents a profile on the main categories of calls for service received from the public that the department handled in 2021. In total, department officers were dispatched to approximately 19,000 calls over the course of 12 months, or approximately 52 calls per day.



TABLE 4-2: Calls for Service, Workload, and Category Rank, 2021

		Con	nmunity-in		Police-initiated			
		Units per		Work- load	Work- load		Units per	
Category	Calls	Call	Minutes	Hours	Rank	Calls	Call	Minutes
Accident	608	2.2	59.2	1,320	3	33	2.2	44.9
Alarm	582	2.0	19.0	369	14	3	2.3	15.2
Animal	190	1.4	27.4	121	17	17	1.2	21.5
Assist other agency	561	2.1	45.2	888	8	126	1.7	41.0
Check	1,019	2.0	30.5	1,036	6	123	1.7	17.2
Citizen assist	845	1.3	35.8	655	10	158	1.3	22.2
Crime-person	420	1.6	45.3	507	12	5	2.0	67.8
Crime-property	352	2.2	89.2	1,151	4	19	3.2	129.8
Custody/warrant	906	1.7	62.8	1,612	2	53	1.6	46.1
Disturbance	120	2.6	148.7	773	9	212	2.8	134.0
Drug	2,591	2.3	42.8	4,251	1	94	2.9	52.1
Follow-up	72	3.3	122.9	487	13	171	3.4	125.1
Investigation	312	1.2	42.1	263	17	732	1.2	44.8
Juvenile	771	1.8	49.7	1,150	5	249	1.9	37.3
Miscellaneous	418	1.7	50.9	603	11	801	1.2	16.4
Suspicious incident	1,239	1.8	25.9	963	7	699	1.9	18.2
Traffic enforcement	444	1.5	28.3	314	15	4,063	1.3	17.5
Weighted Average / Total Calls	11,450	1.9	43.8			7,558	1.5	28.0

In general, CFS volume is within expected bounds. To evaluate the workload demands placed on the department, it is useful to examine the number of CFS received from the public in relation to the population size. With a service population estimated to be approximately 35,800, the total of 19,000 CFS translates to about 530 CFS per 1,000 residents. While there is no accepted standard ratio between calls for service and population, CPSM studies of other communities show a CFS-to-population ratio ranging between 400 and 1,000 CFS per year. Lower ratios typically suggest a well-managed approach to CFS. The value of 530 CFS/per thousand/year would suggest a normal CFS volume.

Even though CFS volume is typical per capita, it also appears that the EMPD could consider being more aggressive at triaging CFS. Certain types of calls do not necessarily require the response of a sworn police officer. One such type of call is responding to alarms, most of which turn out to be false. Another type is motor vehicle accidents involving only property damage, where the police role is largely administrative, that is, preparing and filing a report. The bottom line here is that a substantial number of CFS dispatches to officers could be eliminated. This would free officers' time to address other conditions present in the community as opposed to spending time at CFS at which their services are not essential. This is particularly important given the small number of officers assigned on patrol during any given shift. Sparing these officers from responding to non-emergency CFS would enable them to remain available and on patrol in the community.

Out-of-Service Time

From our analysis, it can be seen that officers are occupied by a very high level of out-of-service work. This workload is represented by the purple area in Figures 4-1, 4-3, 4-5, and 4-7. The time involved with this out-of-service work is categorized in the following table. The various codes officers use to account for their time off patrol are in the table, but the specific activities related to these codes is uncertain.

Typically, officers will be out-of-service for one of many reasons. They could be on personal or meal break. They could be at court or other administrative hearing. They could be conducting follow-up investigations for offenses that they handled on that tour or a previous one. They could be attending in-service training during their shift. They could be writing reports related to the CFS they handle. They could be doing research related to operational initiatives they are involved in or following up from those initiatives. There could also be a general avoidance of patrol and an overabundance of "water cooler" activities with other officers. The exact nature of the out-ofservice time is unclear, but what is clear is that the EMPD is an outlier when it comes to the scope and frequency of out-of-service time.

A typical police department studied by CPSM will report about 15 percent of all committed work time will be related to out-of-service activities. In El Mirage this percentage is closer to 50 percent. In other words, for every minute officers on patrol spend handling a CFS, they spend another minute out-of-service on administrative or non-patrol activities. This is one of the main drivers of the high workload in the EMPD and is compromising the department's ability to provide efficient police services.

The prevalence and frequency of these administrative activities is relatively consistent throughout the day and appears on weekdays and weekends in both winter and summer. Therefore, the time spent on these activities is not isolated to a particular shift or time of the day or year, but is an elementary function of patrol operations. Determining the exact nature of these activities and whether or not they are required is well beyond the scope of this assessment and report. However, the common nature in all periods examined suggests these activities are "baked" into the operation.

Figure 4-1 illustrates one example. The blue arrows in the figure point to the times that are between shifts. Workload spikes during these overlap periods and this is almost entirely driven by out-of-service time. Essentially, both the incoming shift and the outgoing shift are out of service for almost the entire hour they are overlapped. This is not consistent with report writing, operational planning, or personnel breaks, but may indicate a simple lax approach to shift change.

Similarly, oftentimes policies are promulgated, rules are issued, forms are created, and processes implemented that at the time are appropriate. But as time goes on, these processes remain in place without a clear rationale for them anymore. They are vestiges of past issues of importance, but no one takes the time to revisit them and possibly discontinue them. These rules often contribute to meaningless activities that could be discontinued or streamlined.

Effective report writing and operational planning are essential components of police work. Relentless follow-up is also critical. Empirical research suggests that crime clearance rates are significantly related to the quality of preliminary investigations. Officers on patrol should not be discouraged from using out-of-service time for follow-up and report writing; however, they should be discouraged from engaging in wasteful and frivolous time away from patrol.

As we cannot know the frequency and extent of the time actually used for these purposes, CPSM recommends that the EMPD establish a committee to explore the issue. This committee should consist of a representative group of EMPD personnel and should be charged with identifying the cause of this seemingly excessive out-of-service time usage, as well as recommendations to ensure it is used judiciously.

TABLE 4-3: Activities and Occupied Times by Description

Status	Description	Occupied Time	Count
103 (At station)	Briefing	74.9	189
	Paperwork	74.6	87
	Training	105.2	17
	Miscellaneous*	40.1	23
	Other*	68.8	825
	No description	60.7	394
BUSY	103 (At station)	63.9	5,131
	Briefing	66.7	1,067
	Fuel	8.8	157
	Paperwork	79.6	1,115
	Training	134.5	132
	Miscellaneous**	59.7	377
	Other	54.6	492
	No description	42.3	19
Fuel	Fuel	8.5	349
Paperwork	Paperwork	69.2	821
Administrative - Weighted Average/Total Activities		64.4	11,195
103	Meal break	24.3	2
BUSY	Meal break	33.2	101
C7	Meal break	37.0	945
Personal - Weighted Average/Total Activities		36.6	1,048
Weighted Average/Total Activities		62.0	12,243

Notes: *For status "103," the "miscellaneous" subcategory included activities with low-frequency descriptions; for example, impounding property, special detail, and court-ordered fingerprints. The "other" category included activities mostly with vehicle number only. **For status "busy," the "miscellaneous" category also included activities with lowfrequency descriptions; for example, fire station, special detail, and quick detail. The "other" category mostly included activities with locations as descriptions.

Managing Calls For Service

Alarms

False alarms are a source of inefficiency for police operations. The alarm industry is a strong advocate of developing ordinances and procedures to address police response to false alarms and will work closely with any agency exploring this issue. The 98 percent of alarm calls that are false are caused by user error, and this can be addressed by alarm management programs. During our study period the EMPD responded to almost 600 alarm calls, or about 5 percent of all community-initiated CFS. The response to the overwhelming majority of these calls is undoubtedly unnecessary, and an inefficient use of police resources.

Surprisingly, the City of El Mirage does not have an alarm ordinance to register alarm installations, regulate false alarms, and mitigate the use of scarce police resources. CPSM recommends that consideration be given to adopting some form of municipal code that can provide some relief for the EMPD in this area. Communities around the country enjoy great success with these types of regulations. They typically feature an annual registration fee for the alarm, as well as a fine schedule as a disincentive for false alarms. Communities that impose higher fee schedules on repeat false alarms experience greater results. Ordinances with nominal fines, such as \$25 to \$50 per false alarm do not reduce false alarms significantly; however, fees of \$500 to \$1,000 for repeated false alarms appear to have a dramatic effect.

With a higher fee level for repeat alarm calls there is a strong incentive for alarm owners to ensure that an alarm is working properly. This can save the police hundreds of hours of wasted time spent on these types of CFS. Similarly, the EMPD should analyze the data on false alarm activations. Undoubtedly, an analysis might reveal useful information. The EMPD might be able to identify problematic locations and/or alarm installation companies that are generating a large number of false alarms and work with them to reduce or eliminate future occurrences. Analysis of the data could lead to companies that have a poor record of installation. Highfrequency alarm violators could be identified and visited by sworn personnel to identify reasons behind the false alarms.

Lastly, some communities have a double-call verification protocol. Under such a protocol an alarm CFS is verified by the 911 dispatcher with the alarm company before an officer is dispatched to respond. Also, the city should consider making greater use of the data it collects on the false alarms already recorded.

Automobile Accidents

Automobile accidents are another category of call for which the response to every accident by a sworn officer is questionable. In the period under observation the EMPD responded to more than 600 motor vehicle accidents. Table 4-2 showed that more than 5 percent of communityinitiated CFS during the study period were for traffic accidents. Those 600-plus accidents occupied an average of 2.2 officers and took approximately 59 minutes of deployed time. This equates to more than 1,300 officer/hours to handle accidents, most of which were probably routine "fender-benders." Arguably, most of these calls were administrative in nature and probably did not warrant the response of a sworn police officer.

The department should consideration ways to modify its approach to vehicle traffic accidents. Similar to the alarm reduction program, the EMPD should take a more aggressive stance towards responding to "property damage only" accidents. Adopting a more aggressive stance towards minor traffic accidents will minimize the number of accidents dispatched to patrol officers.

According to Arizona law, if a motorist is involved in a motor vehicle accident in which a person is injured or there is property damage in excess of \$1,200, the motorist must report the accident to the state and notify the police. Police departments across the state have interpreted this regulation as a mandate to respond to every traffic crash and prepare a report. This results in numerous hours spent by patrol officers responding to and documenting traffic crashes.

CPSM contends that this approach is not an efficient use of patrol officer time. Instead, we suggest that only a limited number of vehicle crashes require a police response. When a motor vehicle is disabled or blocking the roadway, or there is a dispute between motorists, or one motorist is intoxicated, or other criminal activity is alleged, a police response is required. When the crash is routine and none of those factors are present, the motorists should be advised to prepare the required Arizona forms and submit them to the state; no response by the police is necessary. The 911 call by the motorist satisfies the state regulation to notify the police, and the simple exchange of information between motorists documents the incident and satisfies any insurance requirements involved. This process also spares the need for an officer to respond to the scene and keeps them free to perform other, more critical functions.

Assist CFS/Miscellaneous

In 2021, the EMPD responded to 561 "Assist Other Agency," 845 "Citizen Assist," and 418 "Miscellaneous" CFS called in by citizens. Collectively, these categories represented approximately 16 percent of all community-initiated CFS. These categories are used by 911 dispatchers to describe CFS that do not fit into any other type of call. "Assist Public" calls undoubtedly represent the non-emergency CFS that the police are tasked with handling every day. If a crime is reported, it would be categorized as a crime; similarly, accidents, alarms, disturbances, etc. all have a logical label. When a member of the public calls 911 to report a situation that they think requires a police response, but the police dispatcher can't describe it, it goes into this category.

The EMPD should examine the exact nature of these CFS and minimize response to these calls to the greatest extent possible. Dispatchers can be trained to triage calls and screen them out before they are dispatched to officers on patrol. Likewise, shift supervisors could be empowered to cancel responses to these types of CFS when they are dispatched to officers. The point here is that the overwhelming majority of CFS in these categories are not police matters and should be removed from the police responsibility.

Vacation Watch

The department engages in a robust program of "vacation watch" to a wide assortment of locations in the community. The CPSM data analysis indicated that 450 of these Direct Patrols were conducted in El Mirage during the year studied. Units on patrol can be assigned a "vacation watch" by the department or at the request of a property owner for added security in their absence. The EMPD is to be commended for implementing such a robust program; however, an opportunity exists to dramatically improve the delivery of these services on three different levels.

From a criminological standpoint, research shows that spending as little as 15 minutes in a crime "hot spot" has a deterrent effect on crime at that location. Officers may be directed to these locations based upon many factors. Along these lines, the EMPD is providing a visible presence in the locations where crime could occur. An opportunity exists here to enhance this approach.

It was determined that patrol officers are told of the time, place, and general condition that they are addressing. While this is sufficient information for patrol officers to respond to these locations and provide a visible police presence, it's not much more than that. This information, while valuable to orient the officers to the times and places of potential crime events, should be included as part of a strategic approach to crime reduction. This approach is also discussed later in the report, but involves identifying with greater precision the human and environmental variables associated with the crime. In other words, Who are the known offenders? What victims/locations/vehicles do they target? What kind of property is taken? Should the officers make crime prevention recommendations to the property management? Where should cameras be deployed and should the recordings of these cameras be viewed? What is the long-term plan to address these occurrences and how do all of the units of the EMPD factor into that plan?

There is also an opportunity to explore the tension between quality, as opposed to quantity, of these activities. The EMPD conducts these vacation checks each day, but is there an understanding of how well they are being conducted? For example, is conducting a 30-minute

"vacation watch" adding value in terms of either crime deterrent or community satisfaction to the overall efforts of the department? What is being done during these patrols? Should they be longer? Is there any intelligence collected, and how should that be reported? In other words, the quality of these checks should be the focus, and not just the quantity, or simply the fact that a patrol was conducted.

The EMPD should also consider formalizing a feedback-loop with respect to vacation watches. The EMPD should consider periodically contacting at least a sample of the requesting community members to let them know about the services the police department provided and also to inquire if the citizen's problem was addressed. This feedback loop provides a higher quality of service by letting the citizen know that the department responded, and lets the department know if its efforts actually made any difference. This information could also point the way to improvements in the service.

Essentially, the EMPD has the foundation of an excellent approach to police service. Leveraging the already robust directed patrol program along the three dimensions mentioned above will take this program to the next level and provide the high level of service that the community expects from the department.

Follow-Up

Officers on patrol are encouraged to conduct follow-up investigations regarding criminal complaints they receive. As discussed previously, this is a good idea and enhances patrol operations and service delivery. Caution must be exercised here to ensure that these follow-up investigations are not interfering with patrol availability and the primary duties of a patrol officer.

Anecdotal reports from EMPD personnel indicate that this facet of patrol does not overwhelm officers. There are no strict guidelines on what to investigate, and no case management protocols for the cases officers do investigate. On its face, this appears to be sound. The scope and frequency of these activities appears to be appropriate. In fact, considering that the average follow-up CFS has more than three officers assigned for more than two hours, this would suggest that this category is used to describe team-based, problem-solving initiatives. Again, while this appears sound, this category of CFS should be given greater scrutiny and be part of the discussions for the committee set up to explore out-of-service times.

Combined, the categories of CFS just discussed (alarms, traffic accidents, assist calls, checks, miscellaneous, and follow-up) made up about 36 percent of all community-initiated CFS handled by the EMPD in 2021. This means that almost one in three community-initiated calls handled by the EMPD have the potential to be handled differently or not at all. Reducing officer responsibility from handling frivolous CFS and refocusing on things where the police can have an impact is an opportunity for improvement.

CPSM recommends that from a policy perspective the responses to major categories of CFS be reduced. However, this recommendation does not mean there should be an immediate cessation of response to these types of CFS. Best practices in American policing indicate that by working in collaboration with stakeholders in the community a dialogue can begin, and a critical evaluation of appropriate responses to these types of calls can be started. With community input and approval a decision can be made about the necessity of a police response to these CFS. If the community maintains that a police response is necessary, then the public funds need to be committed to ensure sufficient police personnel are available. Good government and efficient management, however, require that scarce resources be committed only when and where they are absolutely necessary, and this is an area that is ripe for evaluation.

In addition to the community-initiated CFS discussed above, the EMPD handles thousands of selfinitiated CFS as well. Among these types of CFS are areas where the department should pay careful attention and design managerial oversight processes to ensure officers are engaging the public effectively.

Traffic Stops

Traffic safety is an important core mission of any police department. Similarly, complaints about traffic are generally the most frequent kind of complaint that the police receive from the public. Therefore, managing traffic conditions, reducing traffic crashes, and preventing injuries that might otherwise occur are important responsibilities for the police.

During the period studied, the EMPD engaged in 4,500 traffic stops. These stops accounted for approximately 54 percent of police-initiated activity and 24 percent of ALL CFS handled by the department. This is an enormous amount of activity, in both sheer numbers and in context of total work, and signifies a very robust approach to traffic enforcement. It is not clear, however, if this enforcement is contributing to any improvement in overall traffic safety in the community.

A full discussion about traffic safety is presented later in this report; however, CPSM recommends that patrol officers in the EMPD minimize routine traffic stops. Instead, the EMPD should leverage traffic crash data to focus enforcement efforts on the locations deemed most prone to accidents, and on drivers deemed to be at the highest risk of causing them. Routine, or random, motor vehicle stops should be discontinued or drastically reduced. Without any direction about where to focus, or for what types of violations, officers are left to conduct this enforcement as their shift permits. It is this type of unfocused traffic enforcement that should be discontinued.

Suspicious Incident

In 2021, officers in the EMPD responded to 1,938 CFS in the category of Suspicious Incident. This category of CFS describes situations where the caller does not see evidence of a crime being conducted, but may see something that they think is not quite right. Perhaps there is someone walking up and down driveways, or parked in front of their home for an extended period of time. The caller has a suspicion or a hunch that something is wrong. This category represented more than 10 percent of all calls for service.

Based on the approach the EMPD takes towards handling calls from the community, undoubtedly all 1,938 of these CFS were answered, and undoubtedly where possible, the officers encountered those suspicious people or vehicles. This is known as an investigative encounter. Some of these encounters might rise to situations where the person is not free to leave. This is known as a "Terry Stop" after the landmark case Terry v. Ohio, and also known as Stop-and-Frisk.

At this level of encounter an officer would need "reasonable suspicion" that a person was committing a crime. There is a fairly low threshold of information needed for officers to articulate reasonable suspicion. The suspicions don't have to be correct, but they need to be reasonable. These encounters are often fraught with danger and that is why the U.S. Supreme Court gave officers a good deal of latitude to protect themselves during these encounters. These encounters can also be situations where racial profiling can occur. Officers might rely on the "profile" of a typical offender they encounter and use that past information to inform their decisions about future encounters. These types of encounters must be monitored and managed very carefully. With more than one in ten of all calls making up this category, EMPD officers likely engage in this type of encounter frequently.

Of the 1,938 CFS for suspicious incidents, there are 699 police-initiated CFS in this category. This is the third most common self-initiated form of police activity. In these situations, the police are exercising their broad power and inserting themselves by their own volition, without being called by the public. It is important that these encounters are appropriate, lawful, and conducted professionally. Here too, like the community-driven suspicion, officer suspicion has the potential for racial profiling.

In the case Floyd v. The City of New York, the NYPD was found to have engaged in a systemic practice of unlawful Terry Stops and racial profiling. In the years examined by the court in the Southern District of New York, the NYPD averaged approximately 600,000 stops. The NYPD has approximately 36,000 sworn officers, therefore, this translates into about 17 stops per officer per year.

In the year being examined here, the EMPD responded to 1,938 suspicious persons/vehicle CFS. Surely, not every one of these resulted in a Terry Stop. However, with 58 sworn officers assigned to the EMPD, if all of these were stop encounters, it would equate to more than 33 stops per officer per year. There is absolutely no evidence to suggest that the EMPD is engaging in unlawful stop activity or racial profiling, but the point that is being made is that this is a high-risk area that must be monitored and managed carefully.

At a minimum, officers should be documenting these types of encounters, and recording the gender, race, and age of the people stopped and the reasons why they were stopped. In addition, the EMPD should track, analyze, and publicly report this information periodically.

Calls for Service Committee

It is recommended that the EMPD establish a committee that includes all the principal stakeholders in this process, and which has the responsibility of evaluating the CFS workload with an eye toward recommendations for ways to reduce response to non-emergency CFS. This committee should begin with the categories of CFS discussed here and formulate updated protocols for these assignments. Furthermore, the EMPD should develop a policy that records the race, gender, and age of people involved in traffic stops and reasonable suspicion stops in the community.

Web-based or Deferred Response

Communities around the country have had some success with directing members of the public to file police reports via the internet. Nonserious incidents and minor crimes could be reported through the EMPD's website without the need for officer response. Currently, the EMPD is in the early stages of offering this feature on its website. While members of the public can request "house checks" via the department website, this service could be expanded to a wide variety of crime complaints.

However, industry experience suggests that citizens still prefer the response of a "live" officer to lodge their complaints. Web-based reporting is not a panacea for reducing non-emergency responses, but an excellent tool, nonetheless. As the public becomes more "tech-savvy" this feature could be used more rigorously.

In addition to the web-based reporting, the EMPD could consider staffing a telephone response program to take reports on certain types of CFS. The telephone response or differential response function could deal with past crimes and routine inquiries to the EMPD, thus eliminating the response of a sworn officer. Non-emergency calls, such as past crimes, minor property damage, and harassment, as well as building/area checks, and city ordinance CFS, can be handled by this program. Instead of dispatching an officer to these types of calls, the information is deferred (delayed) until a staff member becomes available to respond to the call, or a public service aid deployed, or another enforcement unit responds as appropriate. Dispatchers can record reports for certain categories of non-emergency incidents over the telephone. This process could divert non-emergency calls from the patrol units, and thus provide officers with more time to engage in proactive and directed patrols or traffic enforcement duties.

CFS EFFICIENCY

Further examination of various elements of the CFS and patrol response data also warrants discussion. Data from various tables and charts in the data analysis section of this report provide a wealth of information about demand, workload, and deployment in El Mirage. Several key pieces of information need to be highlighted to demonstrate the effective use of patrol resources in the city. These statistics are found in the data analysis section in Figure 7-2, Percentage Events per Day, by Category; Table 7-6, Primary Unit's Average Occupied Time, by Category and Initiator; Table 7-7, Number of Responding Units, by Initiator and Category; and Table 7-16, Average Response Time Components, by Category. Taken, these statistics provide an excellent lens through which to view the efficiency of patrol operations.

According to the data in Table 7-6, on average EMPD patrol units take 43.8 minutes to handle a community-initiated call for service. This figure is much higher than expected. The department, according to Table 7-7, dispatches 1.9 officers per CFS, which Is also very high. The number of officers dispatched (like occupied time) varies by category of call, but is higher in the EMPD than policing norms of about 1.6 officers per CFS. In other words, the EMPD uses more time and more officers to handle a CFS than the average police response of other agencies studied by CPSM.²

Similarly, according to Table 7-16, response time for a CFS in El Mirage averages 20.5 minutes per call in the winter and 19.8 minutes per call during the summer. This is approximately 33 percent longer than an acceptable response time of about 15 minutes to the average CFS. Response time to "high-priority" CFS is higher than CPSM's benchmark. The EMPD averaged 6.1 minutes to respond to a high-priority CFS. This is somewhat higher than the benchmark of 5 minutes.

These metrics indicate that CFS response is both under stress and not efficient. The department spends too much time per CFS, takes too long to respond, and does not enough uncommitted time available for sound patrol operations.

§ § §

^{2.} CPSM benchmarks are derived from data analyses of police agencies similar to the EMPD.



TABLE 4-4: CFS Efficiency, El Mirage PD Compared to CPSM Studies Benchmarks

					EMPD vs. CPSM
Variable Description	Mean	Minimum	Maximum	El Mirage	Comps
Population	67,745.7	5,417.0	833,024.0	35,200	
Officers per 100,000 Population	201.2	35.3	465.1	164.7	LOWER
Patrol Percent	66.1	32.4	96.8	54.4	LOWER
CFS Rate	1,004.8	2.2	6,894.2	527	LOWER
Avg. Service Time, Police CFS	17.7	8.1	47.7	28.0	HIGHER
Avg. Service Time, Public CFS	28.7	16.0	42.9	43.8	HIGHER
Avg. # of Responding Units, Police CFS	1.2	1.0	1.6	1.5	HIGHER
Avg. # of Responding Units, Public CFS	1.6	1.2	2.2	1.9	HIGHER
Total Service Time, Police CFS (officer-min.)	22.1	9.7	75.7	42.0	HIGHER
Total Service Time, Public CFS (officer-min.)	48.0	23.6	84.0	83.2	LOWER
Workload Percent Weekdays Winter	26.6	5.0	65.0	67	HIGHEST
Workload Percent Weekends Winter	28.4	4.0	68.0	66	HIGHER
Workload Percent Weekdays Summer	28.7	6.0	67.0	65	HIGHER
Workload Percent Weekends Summer	31.8	5.0	69.0	62	HIGHER
Average Response Time Winter	11.0	3.1	32.2	20.5	HIGHER
Average Response Time Summer	11.2	2.4	33.3	19.8	HIGHER
High-priority Call Response Time	5.0	3.2	13.9	6.1	HIGHER

Calls for Service Recommendations:

■ Create a CFS working group to explore potential ways of eliminating workload demands and non-emergency CFS from patrol workload. (Recommendation No. 1.)

§ § §

SCHEDULE AND STAFFING

Further examination of various elements of the CFS and patrol response data also warrants discussion. Data from various tables and charts in the data analysis section of this report provide a wealth of information; readers are encouraged to review the data section in its entirety.

Schedule

The next areas for consideration are the patrol shift schedule and staffing. Taking into consideration the demand for police services and the concept of the saturation index, appropriate levels of patrol staffing can be determined. The optimal level of patrol staffing will lead to the modeling of patrol schedules and act as the foundation for the staffing of the entire department.

The department's patrol force is scheduled in three 10-hour shifts. Officers on patrol work four consecutive shifts and then have three consecutive days off. Officers' work schedule is either Sunday to Wednesday or Wednesday to Saturday (meaning all officers work on Wednesday). There is a one-hour overlap between the graveyard and day shifts (from 5:00 a.m. to 6:00 a.m.), a one-hour overlap between the day and swing shifts (from 2:00 p.m. to 3:00 pm.), and a four-hour overlap between the swing and graveyard shifts (8:00 p.m. to midnight).

The following table presents the combination of personnel assignments for patrol.

TABLE 4	l-5: Patrol	Strength b	y Shift
---------	-------------	------------	---------

Shift	Squad	Shift	Schedule	Lt.	Sgt.	PO	Total
Day	110	5a x 3p	Sun-Wed	1	1	7*	9
Day	120	5a x 3p	Wed-Sat		1	5	6
Swing	210	2p x Mid	Sun-Wed	1	1	5	7
Swing	220	2P X Mid	Wed-Sat		1	7**	8
Night	310	10p x 6a	Sun-Wed		1	5	6
Night	320	10p x 6a	Wed-Sat		1	5	6
Total				2	6	34	42

Notes: * Includes one officer assigned to traffic enforcement, and one officer assigned as a School Resource Officer. ** Includes two officers assigned as K-9 officers.

There are 2 lieutenants, 6 sergeants, and 34 officers assigned to patrol. As discussed above, the structure of the patrol shift schedule in the EMPD creates natural opportunities for officers to come off patrol and assign themselves to administrative duties. This is clear during shift changes in the morning and afternoon one-hour overlaps and in the evening four-hour period when the swing and graveyard shifts are both working. Therefore, the value of having additional personnel, a positive attribute of the 10-hour shift, is wasted simply because of the structure of the schedule.

The most inefficient feature of the current shift plan in the EMPD is the days-off rotation. Currently, patrol officers are divided equally into squads that are essentially mirror images of each other. One set of squads works Sunday through Wednesday (Squads 120, 220, and 320) and the other squads work Wednesday through Saturday (Squads 110, 210, and 310). On Wednesdays all six squads are scheduled to work at the same time.

There are strong opinions about the value of this schedule. For the officers working it, this days-off configuration offers stability. There is no rotation of days off, and no rotation of shift start/end

times. According to the empirical research on shift work, the variable nature of shift work, especially periodic change in the start/end time, is the most disruptive factor and associated with the most negative employee outcomes. The department's current scheme offers constancy that is a positive feature.

The current shift also offers all officers on patrol a guaranteed day off on the weekend (either Saturday or Sunday depending on the side of the rotation). This promotes "normal" lifestyles and is also considered by EMPD management an important and effective recruitment tool for prospective officers. In the current social climate, police recruitment is a challenge. Anything that can position the department in a more favorable light is important and an alteration would need to be considered with this in mind.

Lastly, having all shifts working on Wednesdays allows the EMPD to schedule training on this day. With the surplus of officers, deploying people to training courses does not impact operations. The downside of this is that Wednesday is the only option for this to occur. Training opportunities on any other day of the week would require staffing adjustments.

In addition, with shifts overlapped, the department can deploy officers to handle conditions in the community that they couldn't ordinarily because of staffing. During the CPSM site visit, for example, EMPD patrol officers participated in an operation along the riverbed in the vicinity of U.S. 60 to address a homeless encampment that had been squatting on private property. Having additional resources available allowed the department to commit resources to this operation without impacting patrol readiness.

On the other hand, having twice as many officers working on Wednesdays ignores the reality that demands for police service are greatest during the weekends. Wednesday is among the slowest days for CFS and conditions requiring a police response. It's like having two waiters working in the morning when business is slow so they can be trained and help set up for dinner, but then only having one waiter working during dinner when the restaurant is busy.

The available literature on shift length provides no definitive conclusions on an appropriate shift length. A recent study published by the Police Foundation examined 8-hour, 10-hour, and 12-hour shifts and found positive and negative characteristics associated with all three options.³ The length of the shift is secondary to the application of that shift to meet service demands.

The 10-hour shift is very popular in policing in the U.S. This shift offers the advantages of being not as taxing physically as the 12-hour shift, and still offers an extra day off compared to the standard work-week. The study cited above also presented evidence that the 10-hour shift had the most positive work- and personal-related benefits compared to the other shifts studied. Anecdotally, the officers in the EMPD look favorably on this shift and enjoy the benefits it offers.

The major disadvantage with this shift length is that is that it is difficult to schedule. Ten is not a factor of 24, so organizing the 10-hour shift into a 24-hour day presents challenges. Using the conventional three-shift patrol model creates 30 hours of shift time. Similarly, 10-hour shifts present challenges with scheduling days off. Providing police service requires around-the-clock coverage. Eight- and 12-hour shifts feature natural opportunities to create rotating days on/off to adapt to the 24x7 service demands. Ten-hour shifts are cumbersome to schedule. For a standard work week for an enterprise that is closed on weekends, there are no real challenges, but when applied to seven-day coverage the problems arise and days off get "shoe-horned" into place with no natural combinations available.

^{3.} Karen L. Amendola, et al, The Shift Length Experiment: What We Know about 8-, 10-, and 12-hour Shifts in Policing (Arizona, DC: Police Foundation, 2012).



33

The 12-hour shift poses advantages and disadvantages as well. On the positive side, the 12-hour shift requires fewer work appearances for officers and supervisors. Presumably, fewer appearances translates into a higher quality of life away from work. From an operational perspective, the 12-hour shift results in a greater percentage of officers working on any given day, thus more officers to deploy toward crime, traffic, disorder, and community issues at any one time. This shift also affords a tight unity of command with supervisors and officers working together each shift. This promotes better supervision and better esprit de corps among employees.

On the other hand, a 12-hour shift configuration with four equally staffed squads results in a constant and fixed level of patrol staffing throughout the day. However, service demands vary, peaking in the evening hours and waning in the early morning hours. With a constant supply of personnel and a variable demand for their services, there will be a continual cycle of either a surplus or shortage of patrol resources. Also, with a four-squad configuration a "silo" effect is often created. The natural rotation of this shift configuration creates four separate squads that do not interact often; this creates personnel "silos." Similarly, it is difficult to communicate between the "silos" and between the squads and the executive management of the department. Lastly, shifts configured with two 12-hour shifts meet face-to-face but do not have any overlap. This creates problems, particularly in the evening when CFS volume is high. One shift stops taking CFS near the end of their deployment, and the oncoming shift delays taking CFS on the start of theirs. This creates gaps in patrol coverage.

Eight-hour shifts also offer advantages and disadvantages. Like the 12-hour shift an 8-hour shift lends itself to a natural and consistent rotation of days off and as well divides equally into the 24hour day. It is easy to implement and follow for the officers working it. The main disadvantage is that officers are required to work an extra day each week, or 52 times more per year. It appears that given the organizational and operational climate in El Mirage, the 8-hour shift would not be viable and will not be considered as an option for the department.

Due to the inherent logistical challenges associated with the shift plan being implemented in the EMPD, CPSM recommends that consideration be given to altering the patrol schedule. The adjustment recommended below will improve CFS responses and structure patrol staffing in a way that can be more effective at implementing a strategic approach to community conditions.

Patrol Modifications

In order to address the liabilities presented by the structure of the current patrol schedule the EMPD could explore one or more modifications to the schedule. All of the modifications presented below will ensure that the EMPD continues to meet demand while becoming more efficient.

Option 1 – Implement a Four 10-hour shift plan

This option maintains the 10-hour shift but adds a squad to the current patrol rotation. Therefore, four squads would be scheduled to work each day instead of three. The following table illustrates a schedule that features four 10-hours shifts. This schedule relies on the current patrol allocation of 2 lieutenants, 6 sergeants, and 34 officers. Under this plan the number of officers assigned per shift varies. This model increases the number of officers assigned form 1000 hours until 0200 hours. The overlap periods can be changed to suit the needs of the department and may be adjusted for winter and summer deployment as workload changes during the year. The squads that have single coverage during some part of the day are staffed with additional officers in order to provide coverage.

TABLE 4-6: 10-hour Shift Configuration

	Lt.	Sgt.	P.O.	Total
Varies	1			1
0600x1600		1	5	6
1000x2000			3	3
1600x0200		1	4	5
2000x0600		1	5	6
	1	3	17	21

Under this configuration, officers would be deployed as shown in the next table.

TABLE 4-7: 10-hour Shift Deployment

Hour	1000×2000	2000x0600	0600x1600	1600x0200	Total
12 AM		5*		4	9
1 AM		5		4	9
2 AM		5			5
3 AM		5			5
4 AM		5			5
5 AM		5			5
6 AM			5		5
7 AM			5		5
8 AM			5		5
9 AM			5		5
10 AM	3		5		8
11 AM	3		5		8
12 PM	3		5		8
1 PM	3		5		8
2 PM	3		5		8
3 PM	3		5		8
4 PM	3			4	7
5 PM	3			4	7
6 PM	3			4	7
7 PM	3			4	7
8 PM		5		4	9
9 PM		5		4	9
10 PM		5		4	9
11 PM		5		4	9

Note: *Does not includes supervisors.

The table above shows that teams of three to five officers report for duty at multiple occasions throughout the day. From 1000 hours all the way until 0200 hours, there are two teams assigned at the same time, which results in five to nine officers assigned to patrol during this time period. Each squad has additional officers assigned to account for regular days off, sick, vacation, etc. The exact structure of the days off could be flexible or fixed depending upon the needs of the department and the officers.

The advantages of this shift plan are that it has the same basic level of patrol coverage as the existing schedule and then increases the coverage during the busiest times and reduces coverage during times when demand is lower. This is a similar feature of the existing schedule, but this version smooths out the shift overlaps. Instead of having three periods of overlap (one hour each at shift change from nights to days and from days to evenings, and the four-hour overlap from evenings to nights), there is a regular presence of an overlap during most of the day. This mitigates the mentality of being "relieved" (and going to administrative time from patrol). The only real "shift change" is at 0600 hours on this schedule where there is a true hand off of responsibility for patrol from one shift to the next. During the other times of the day officers would simply remain on patrol and be joined by resources regularly from the oncoming shift.

Option 1a – Status Quo

The least disruptive approach to implementing a shift schedule with four 10-hour shifts would be to maintain the current system of days off. Having one set of squads work Sunday through Wednesday and the other from Wednesday to Saturday (with Wednesday double-staffed) would maintain the status quo, but this is not recommended.

Clearly there is an advantage to how training can be scheduled under this plan, and anecdotal information indicates this system promotes recruiting and is liked by the officers. However, designing a workplan should be based on the operational needs of the department. Training can be scheduled around the shift schedule, and there are other workplans that can appeal to officers (prospective and incumbent). The surplus staff on one day of the week, but overworked staffing on other days, make continued use of the current plan unadvisable.

Option 1b - Days Off - "Payback"

This plan does not contend with the days off rotation and the double day on Wednesdays. CPSM offers an alternative that could be advantageous to the department. Instead of having squads doubled-up every Wednesday the shifts could be arranged in a rotation of four days off and four days on.

Essentially the different "sides" of the patrol schedule would rotate around one another. Under this model officers would work 182.5 days per year on average. This translates into 1,825 hours worked each year based on a 10-hour day. Currently, officers work 2,080 hours per year (4 days each week x 10 hours x 52 weeks), therefore, this modification would result in officers scheduled for 255 fewer hours each year. This translates into approximately 25.5 ten-hour shifts each year. These 255 hours, or 25.5 shifts, would need to be paid back by the officers over the course of the year.

These "payback" shifts, approximately two per month, could be worked at the officers' discretion, be used to offset time off from training or court appearances, or the officers could even elect to take a reduction in compensation and not work the hours/shifts and lower their pay. Similarly, the department could use these payback shifts to cover vacations, long-term sick, military leaves, etc. The loss of one officer from the regular rotation on patrol creates real personnel issues and this type of arrangement could help offset the impact of these long-term absences and save money on overtime. Also, the department could detail extra officers to work on Fridays and Saturdays or for special events and cash in on this bank of time instead of paying overtime or running shorthanded as is common now.

This time could also be leveraged to plan and execute problem-based operations that tackle crime, traffic, and disorder conditions in the community. Instead of limiting these initiatives to Wednesdays when the problem might not actually be most acute, the department could schedule these initiatives on days when additional personnel are actually needed and deploy them accordingly.

There are many ways to implement this type of plan. Many departments do a combination of things. It's possible to schedule every other Wednesday, for example, or every third Wednesday for the doubled day. This maintains some predictability in the schedule of the double day and reduces the "payback" bank of time. Managing the scheduling of payback time can be difficult. This is an important consideration for the EMPD if this plan were to be implemented. Could the department even staff this much time on an ad hoc basis and does the managerial capacity to track the payback time exist?

Departments also adjust the length of tour to account for shift changes more explicitly. In other words, the shift length could be 10.25 hours, with the 15 extra minutes dedicated to shift change. This presents a clear signal that Briefing is 15 minutes long and patrol starts immediately thereafter. Adding the extra 15 minutes to each day would lower the "payback" bank by approximately 46 hours; extending the extra time to 30 minutes would reduce the payback total for each officer by 92 hours. In either case, the department still can count on a substantial bank of time with which to deploy officers in creative ways to lower costs, address crime and disorder, and still provide officers working the schedule with four days off in the standard week. Considering the creative ways the EMPD addresses other areas of management, this approach would seem relatively simple to implement.

Option 1c – Flexible Days Off

A unique approach to staffing patrol would be to build a plan with wide-ranging flexibility. Under such a plan, after minimum staffing is set, officers select the days they want to work while rules about sign-up ensure that minimum is met. Currently, four officers are required at any given time.

There are numerous ways a self-selection of work days could be accomplished. It could be by seniority, on a rotating basis, or a combination, but the basic approach would be that officers would take turns scheduling themselves across a fixed time period.

For example, over a 28-day period an officer is required to work 16 shifts. Starting with the officer with the most seniority that officer selects any 16 days to work over the 28-day period. This could be the same four days each week with the same three days off. This might also be 16 consecutive days with 12 days off in a row. The only restriction would be that an officer may not select a day that is already over the minimum if there is a day available where the minimum has not been met.

There are 10 officers assigned to day shift. The combined number of officer-days is 160 across a 28-day period. Over that same period there are 112 (28 days x 4 positions) minimum shifts required. Therefore, there should be ample opportunity for officers to schedule themselves while accounting for vacation, training, etc.

The division commander or one of the patrol lieutenants would be responsible for the overall scheduling and could even block-out specific days during the period to ensure more officers are assigned. Special events, such as July 4th could be designated as "must appear" days, ensuring more officers are assigned than the minimum requirement.

This approach would be an attractive recruitment tool and offer officers more flexibility in their schedules. For most, the schedule would probably be similar (or identical) to what they work now, but for others it would allow a better work-life balance.

If this approach were to be considered by the EMPD, it is recommended that a committee of stakeholders be created to explore the mechanism for how officers would self-select days on and off.

Option 2 – 12-Hour Shifts

Another possibility for the EMPD is to implement a 12-hour shift rotation. Police departments all around the country implement this shift length successfully. The major advantage of this schedule is that it maximizes the amount of resources that are available at any time during the day. At a minimum, 25 percent of the patrol force is working at all hours of the day. Another advantage is that the patrol squads work together at the same time as their supervisors, and always work together as a squad. Officers, therefore, have the same supervisor every day, and work with the same officers every day. This establishes unity of command and a high degree of esprit de corps with the squad.

This shift rotation has disadvantages as well. With the patrol force divided equally into four squads, the same number of personnel are assigned to work every hour throughout the day. The workload fluctuates throughout the day but the level of personnel assigned remains the same.

This shift model requires 2 lieutenants, 4 sergeants, and 24 police officers deployed in squads illustrated in the following below.

Leadership of these personnel would be provided by the two lieutenants acting as shift commanders. One lieutenant would be the day watch commander and work hours aligned with the day shift, and the other would be the night watch commander and work hours aligned with the night shift. Their days off would be flexible and determined by operational need.

TABLE 4-8: 12-hour Shift Configuration

Squad	Shift	Lt.	Sgt.	PO	Total*
Α	0600X1800	1	1	7	9
В	1800X0600	1	1	7	9
С	0600X1800		1	7	8
D	1800X0600		1	7	8
		2	4	28	34

Note: *Lieutenants are carried in Squads A and B for illustration purposes. The flexible nature of their days off would permit them to be working with either squad during the shift.

Another added benefit of this plan is it requires fewer personnel. There are two fewer sergeants and six fewer officers needed to provide essentially the same, or greater, patrol coverage. These officers could be redeployed to other units in the department.

Another consideration for this shift plan is supervision. With only four sergeants available there will be gaps in supervisory coverage throughout the year. The current method of dealing with supervisory absences on patrol involves the "Officer-in-Charge" model. CPSM believes this approach exposes the department and the city to liability and should be reconsidered. Staffing a patrol schedule with only four sergeants, therefore, should be considered carefully.

Option 3 – 12-Hour Shift with a Community Response Team

A shift model with considerable potential is an option which features six 12-hour shifts. There would be four main patrol shifts primarily responsible for handing CFS. Layered on top of these four shifts would be community response teams (CRT). These teams would work the same rotation of days off and be assigned to overlap the patrol teams during the times when workload demands are highest. Personnel assigned to the teams would also be responsible for conducting proactive enforcement, engage in long-term problem-solving, and act as a primary resources to the organized community. One officer in each team would be assigned to be the liaison with specific community groups in El Mirage. On a day-to-day basis the CRT would interact with the organized communities in these neighborhoods, work on their long-term issues, and be available as a team to conduct enforcement operations directed at crime, disorder, and traffic. This model also requires less personnel to implement with greater coverage.

The following table shows how the patrol division might be organized under this model:

TABLE 4-9: 12-hour Shift Configuration with Community Response Teams

Squad	Shift	Lt.	Sgt.	PO	Total
Α	0600X1800	1	1	6	8
В	1800X0600	1	1	6	8
С	0600X1800		1	6	7
D	1800X0600		1	6	7
CRT-1	1200x2400		1	2	3
CRT-2	1200x2400		1	2	3
		2	6	28	36

For any of the 12-hour shifts CPSM recommends a rotation that limits the number of consecutive days worked and provides for every other weekend off for personnel. Days off under this plan would rotate on a bi-weekly basis. Each squad would have an alternating rotation of two- and three-day combinations. The rotation shown in the following table is commonly known as the "Pitman" schedule. The four squads work opposite each other. Two share the same work hours, and the other two share the same day-off rotation. The rotation permits each squad to have every other weekend off. This schedule calls for seven 12-hour shifts over the two-week period. This will result in 84 work hours. This will require the EMPD to fund the extra hours each period or require officers to use the overage number of hours of time each period. The logistics of the 84hour period would need to be determined by the department.

TABLE 4-10: Rotation with Days Off for 12-Hour Shift Schedule

	Day:	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Shift	Sqd	М	T	W	Н	F	Sa	Su	М	T	W	Н	F	Sa	Su
6X18	Α	ON	ON	OFF	OFF	ОИ	ON	ON	OFF	OFF	ON	ON	OFF	OFF	OFF
18X6	В	ON	ON	OFF	OFF	ON	ON	ON	OFF	OFF	ON	ON	OFF	OFF	OFF
6X18	С	OFF	OFF	ON	ON	OFF	OFF	OFF	ON	ON	OFF	OFF	ON	ON	ON
18X6	D	OFF	OFF	ON	ON	OFF	OFF	OFF	ON	ON	OFF	OFF	ΟN	ON	ON
12x24	CRT	ON	ON	OFF	OFF	ON	ON	ON	OFF	OFF	ON	ON	OFF	OFF	OFF
12x24	CRT	OFF	OFF	ON	ON	OFF	OFF	OFF	ON	ON	OFF	OFF	ON	ON	ON

Under this model, the lieutenants could be tasked with overall responsibility of carrying out the strategic plan of the department and use their resources to reduce crime, disorder, and improve traffic safety and the response to community problems. Considering that many problems are unique to day and night, the temporal assignment of responsibility, as opposed to geographic or spatial, might make more sense for the EMPD. The daytime shifts could be focused on traffic, daytime burglaries, park conditions, etc., and the nighttime teams focused on disorderly bars and clubs, car theft, DUI enforcement, etc. Each shift would have an operational plan and the lieutenants would be responsible for executing that plan and using the experience and authority to marshal departmental resources to achieve the goals of that plan

Under this model, each squad would have four officers assigned to specific beats and be expected to carry out the strategic priorities of the department. These teams would be supported by the CRTs assigned to patrol. These teams would work with the community and other units of the police department and city/state/federal officials to identify and solve community problems. These problems can range from crime, to traffic, to disorder, to schools, etc. Essentially, this approach incorporates the "S.A.R.A" process of community policing (scanning, analysis, response, and assessment) with problem-oriented policing to eliminate community problems.

Option 4 – Hybrid

A possible hybrid option would involve the use of both 10-hour and 12-hour shifts. For 10-hour shifts CPSM recommends a four-squad plan as discussed above. Officers working these 10-hour shifts would have four steady days on, Sunday to Wednesday for example.

A different set of officers would work 12-hour shifts on the days when the 10-hour shift officers are off duty. Building on the example above, and utilizing the community response team models, three squads of officers would work on Thursday, Friday, and Saturday. Therefore, Sunday, Monday, Tuesday, and Wednesday would feature 10-hour shifts, and Thursday, Friday, and Saturday would feature 12-hour shifts. The following table provides an illustration of this shift schedule.

TABLE 4-11: Hybrid Schedule with Both 10- and 12-Hour Shifts

Team#	Work Days	Hours	Lt	Sgt	PO	Total
	Sun-Wed	Varies	1			1
	Thu-Sat	Varies	1			1
1	Sun-Wed	0600x1600		1	5	6
2	Sun-Wed	1000x2000		1	2	3
3	Sun-Wed	1600x0200		1	3	4
4	Sun-Wed	2000x0600		1	5	6
5	Thu-Sat	0600x1800		1	5	6
6	Thu-Sat	1200x2400		1	2	3
7	Thu-Sat	1800x0600		1	5	6
			2	7	27	36

Staffing

Depending upon the approach taken by the EMPD with respect to the first two steps in this analysis (demand reduction and shift realignment) it may be necessary to add sworn personnel



to patrol. If the status quo schedule remains in place, CPSM recommends that the minimum staffing level on patrol be increased from four officers to five officers. Therefore, on each shift every beat would be covered by one officer and there would be a "resource officer" assigned to handle CFS and support the beat officers carrying out the strategic plans of the department.

Using five officers as a minimum would require adjustments to all of the proposed shift schedules in the tables shown above.

Schedule and Staffing Recommendations:

- Empanel a Shift Review committee to explore the options as presented by CPSM and determine which, if any, are suitable for use in the EMPD. (Recommendation No. 2.)
- CPSM's recommendation is that the EMPD implement Option 3, 12-Hour Shift with a Community Response Team This would entail staffing patrol using six, 12-hour shifts with personnel deployed as shown in Tables 4-10 and 4-11. This plan will result in patrol staffing of 2 lieutenants, 6 sergeants, and 28 police officers. (Recommendation No. 3.)

Patrol Supervision – Officer-In-Charge (OIC) Model

As illustrated in Table 4-10, each patrol squad in the EMPD is to be supervised by one sergeant. Under this system there is one supervisor assigned around the clock to cover patrol operations. In the event the assigned supervisor is unavailable (vacation, sick, training, etc.), the EMPD relies on an "Officer-in-Charge" model of supervision. The OIC model essentially calls for a previously identified police officer who has received supervisory training to act as the temporary supervisor for that particular shift in the sergeant's absence.

CPSM recommends that the OIC model of shift supervision be eliminated. While the OIC receives training for this position, the notion that effective supervision will be delivered by an OIC who will revert to a patrol officer role at the next shift seems unrealistic. The EMPD should ensure that a supervisor, that is, a sergeant or even commander if necessary, is assigned to supervise patrol operations at all times. Having a sergeant assigned to each shift will improve supervision and command and control of emergency incidents as well as provide a greater protection against liability for the city.

Patrol Supervision Recommendation:

Discontinue the Officer-in-Charge model of patrol supervision and require personnel in the rank of sergeant or above to supervise patrol operations at all times. (Recommendation No. 4.)

§ § §



CRITICAL SERVICE AREAS

The following is a discussion of several critical service areas being implemented by the EMPD.

Community Engagement

The department employs a non-sworn Community Policing Specialist. This individual is charged with developing and coordinating community outreach activities and maintaining the department's social media presence on all major platforms.

The department has a presence on Facebook, NextDoor, Neighbors, Instagram, Twitter, and YouTube. The department's Facebook page currently has approximately 9,200 followers. The page is utilized for transmitting alarms regarding lost persons, BOLAs, weekly traffic restrictions (i.e., construction sites), notifications regarding unclaimed property, safety tips (such as a dating violence awareness presentation), and a wide variety of public interest stories about EMPD officers and employees positively interacting with members of the community. The Community Policing Specialist actively monitors other city feeds in an effort to identify positive stories about the department and its employees. Of particular note is a recent story about a young boy who received a police escort home from the hospital after a long stay. Such public interest stories are now critically important, not only in terms of projecting a positive image of the department, but to create and maintain a positive "brand" or image that will enhance recruitment by attracting qualified police applicants.

The department has participated in a Coffee with a Cop program. It also participated in "National Night Out" activities, which have "unfortunately been stalled by COVID." Such efforts are strongly recommended and should be continued. The department also performs vehicle window VIN etching, by appointment.

The department has actively worked to develop a community block watch program. CPSM was advised that this program really started to take off a few years ago, "but COVID killed it off." The Community Policing Specialist is now working to relaunch and expand the program. Block watch signs were being installed throughout the community at the time of our site visit. Research suggests that efforts and programs such as these have some value in terms of actual crime suppression, but greater value in terms of community building and improving public relations. Perceptions and fear of crime are important community dynamics that must be actively managed by all American police departments. These efforts should continue to be supported.

The department is currently developing a "virtual block watch" program. This program will utilize feeds and data from residential and commercial video cameras located throughout the city, as well as GIS plotting software. A census of cameras located throughout the community is currently underway. The department is also currently utilizing Ring-Neighbors Public Safety Service (https://ring.com/neighbors-public-safety-service) and NextDoor for Public Agencies (https://go.us.nextdoor.com/agency) to bring an added level of protection and community engagement. Currently, 8,200 El Mirage residents are enrolled NextDoor users. The department is to be commended for utilizing and leveraging these new technologies.

The department utilizes an on-line block watch registration program and an on-line vacation watch program.

The EMPD formerly hosted a Police Explorer Program. This program is now inactive.

The Community Policing Specialist represents the department at community events throughout the city. He has made presentations to small groups at residences and the senior center on such topics as crime prevention and personal safety. There is a cooler of cold water located in the lobby of the headquarters building for community members in need of hydration on very hot days. The Community Policing Specialist coordinates with the department's public information officer (PIO). A patrol lieutenant currently serves as PIO.

In the near future, the EMPD will be creating a position for a sworn officer who will be responsible for "community engagement." This is an excellent addition to the department. The EMPD should consider community engagement an essential part of its strategic planning process. Alongside crime, traffic, and disorder, community engagement and "customer" satisfaction should be considered "mission-critical" perspectives. This is a more granular approach than the typical claims of being a "community policing" department and should be pursued vigorously. For example, it is one thing to claim that the police department has a community policing philosophy, but what does that actually translate into from an operational perspective?

The first "order of business" for the officer assigned to community engagement should be to develop a community engagement strategic plan. The following are recommendations that might be included in that plan.

- Citizen's Police Academy. This is a program designed to acquaint community residents with the activities of their local department. The programmatic elements vary by department, but generally feature topics such as the use of force, constitutional law, patrol, investigations, special investigations, and organizational structure and functions. Essentially, community members get a better understanding of their police department and police work in general.
- People's Police Academy. This is a mirror image of the Citizen's Police Academy. This type of program orients officers into the community that they are serving. This novel reform effort was pioneered in New York City by the Reverend Que English. She developed a community-led academy to help police officers who don't live or hail from the community to transition into the community they serve through training and orientation. Local civic leaders, politicians, business owners, clergy, residents, etc. all meet with the officers when they get assigned to the department and provide them with an understanding about neighborhood dynamics. This type of program could be developed and implemented in El Mirage and be delivered periodically throughout an officer's career. The idea is to promote understanding and dialogue and provide an opportunity not involving police emergencies for the officers to see the community members as people.
- Police-Community Liaisons. Much like every community is the U.S., El Mirage has a plethora of active civic associations. These organizations each have a mission, function, structure, and leadership, and almost all could benefit from a sound working relationship with the police department. CPSM recommends that the EMPD conduct a census of these organizations in the city and develop a plan to interact with them on a regular basis. The City of Rockville, Md., for example, identifies every community organization within its borders and assigns a ranking officer to be the liaison between the police department and the civic organization. In addition, the city's website has an interactive mapping feature that catalogs each organization and provides contact and meeting information. Actions that could be undertaken in this effort include:
 - Designate a police-community liaison, in the rank of sergeant or above, and assign one to each community group in El Mirage.

^{4.} https://www.ny1.com/nyc/bronx/criminal-justice/2016/03/28/-people-s-police-academy--aims-to-help-officers-better-understand-the-people-they-police



43

- Require the liaison, or designee, to attend organization meetings.
- Develop a system to solicit, record, process, and report on issues that are raised by the organizations. For example, if the organization reports a crime or traffic condition to the liaison it is his/her responsibility to record it and develop a plan to address the condition and report back to the community organization about the efforts to address it.
- Present crime prevention and traffic safety lectures
- The EMPD should develop feedback mechanisms to better measure and understand community satisfaction.
 - A satisfaction survey should be developed and administered at regular intervals. The results of the survey should be posted publicly on the EMPD website.

□ The EMPD should develop a notification protocol where community stakeholders are notified about police-related events in the community. These notifications could be general crime and/or traffic alerts, or specific notifications that involve their specific community.

Community Engagement Recommendations:

- Develop a comprehensive Community Engagement Strategy. (Recommendation No. 5.):
 - Design and host a Citizen's Police Academy.
 - Design and host a People's Police Academy.
 - Develop a Police Community Liaison Program.
 - Develop a robust system to solicit community feedback:
 - Administer a periodic community satisfaction survey.
 - Provide business cards to police officers to distribute to members of the community with whom they have contact.
 - Develop a community notification protocol to keep stakeholders informed on police incidents of importance.
- Explore best practices in police use of social media and expand the current social media program in the department. (Recommendation No. 6.).

Police Assistants

The EMPD currently has two civilian members assigned as Police Assistants (PA). One PA works from 12:00 p.m. to 8:00 p.m. and the other works from 7:30 a.m. to 3:30 p.m. According to the EMPD, the PAs perform a wide array of administrative, clerical, and support duties, essentially police-related tasks that do not require a full-duty sworn officer to perform. There is an opportunity here to develop the PA role and amplify the good work they already do.

Police departments around the U.S. are deploying non-sworn, uniformed personnel to support patrol operations. These positions are not necessarily viewed as support or administrative

positions, but are integrated with patrol officers to aid in providing efficient and effective service. In general, departments that experience the greatest benefit from the PA position embed them in patrol squads and task them with handling non-emergency police CFS. Earlier in this report we discussed the large number of non-emergency CFS handled by officers on patrol. Minor vehicle crashes, nuisance complaints, and parking and traffic complaints are all handled now by sworn officers. These types of calls could be shifted to a PA when they are working. In addition, PAs could respond to reports of past crimes where no suspects are present and the emergency has passed. "Cold" thefts, vandalism, etc. could all be handled by properly trained PAs. To the greatest extent possible, the EMPD leverages PAs in this manner, however, given the workload, additional Police Assistants instrumental in freeing up police officer time on patrol.

The El Mirage community should examine carefully the service demands on the EMPD and look to minimize the response to certain calls to the greatest extent possible. However, there will always be a need for non-emergency police services and PAs could be a cost-effective and operationally efficient way of meeting those demands.

The analysis on staffing presented several options for the EMPD to consider, but whichever option is selected, the EMPD should expand the role of the PAs. If no change is made to the patrol shift plan, CPSM recommends that at least four PAs positions be staffed on patrol, likely one each assigned to the Day and Swing shifts. That said, the Operations Division should examine the most critical days and times when the services of the PA would have the most impact. Having four PAs on patrol will alleviate some of the workload on sworn officers and allow them to use their time more effectively, and possibly even help to reduce the sworn personnel headcount.

Police Assistants Recommendation:

Staff patrol shifts with Police Assistants (PAs) to assist with patrol operations. The number of PAs needed will be determined by the shift plan adopted by the EMPD. Under the current model, four PAs should be deployed, that is, one per squad. (Recommendation No. 7.)

Technology on Patrol

The EMPD could explore the ways to use technology as a way to improve efficiency and provide better service to the public. There are high-tech, low-touch methods of policecommunity interactions that can improve the ability of the police to engage the public in nonconfrontational ways. The following are categories of technology that the department could explore.

The EMPD equips each patrol vehicle with a wide array of technology that is on par with industry standards. Each marked patrol vehicle is equipped with a mobile digital terminal capable of accessing the CAD and RMS systems. Vehicles are also equipped with electronic ticket printers, and officers can access radar and LIDAR speed detection. Each car is also equipped with a heavy-weapons rack and officers can have such weapons mounted inside the vehicle.

Only patrol vehicles assigned to supervisors are equipped with automated external defibrillators (AEDs). AEDs are designed to be simple to use for first responders, and their use is taught in many first aid, first responder, and basic life support (BLS)-level CPR classes. The deployment of AEDs in all marked police vehicles would greatly enhance the life-saving capabilities of the department. These inexpensive (less than \$2,000 each unit) and easy-to-use devices would be a tremendous asset to the EMPD. Their purchase and deployment is strongly recommended; while all patrol

vehicles should be equipped with an AED, at least one vehicle on patrol at all times should be so equipped.

LPR and CCTV Deployment

Police departments around the world are leveraging license plate readers (LPR) and closedcircuit television (CCTV) to improve operations. Perhaps the most well-known use of this technology is in London and New York where those communities have created a so-called "Ring of Steel" to combat terrorism and improve public safety. 5 Even smaller communities such as the Village of Southampton in New York, a beach community of about 3,000 people, deploy these devices effectively. Obviously, El Mirage does not need to create a Ring or Steel to combat terrorism, but strategically-sited LPRs and CCTVs could help improve public safety.

This report earlier recommended that EMPD officers refrain from making random traffic stops and instead focus on high-risk crash locations and high-risk drivers, Similarly, crime is not randomly distributed in the community, but concentrated in specific locations or hot-spots. The EMPD could use the data about high-frequency crash locations and crime hotspots to deploy LPRs and CCTVs to help combat these conditions. Also, the LPRs can be programmed to identify vehicles with suspended registration or insurance (at-risk drivers) to help make the police job more effective at targeting these motorists. Instead of the police stopping people at random and opening themselves up to allegations of profiling, the technology would identify the at-risk motorist and eliminate any perceived profiling by the police.

Locating LPRs and CCTVs at strategic and hot-spot locations would provide the EMPD the means to improve traffic safety and combat crime conditions.

Body-Worn Cameras

Officers in the EMPD are deployed with body-worn cameras (BWC). These devices are an essential part of an officer's duty equipment and are becoming more and more important. The use of BWC video recordings offers an enormous upside potential to improve police operations and community relations.

EMPD policy requires that sergeants review two BWC videos each month for each officer under their supervision. The sergeants use their discretion to select the videos and use them as a tool for remote supervision and look to identify exceptional performance for reward as well as subpar performance for correction and training. These reviews are also evaluated by the patrol lieutenant as well as the division commander. In addition, all use of force incidents captured on BWCs are reviewed not only to assess the justification for the use of force but to ensure that appropriate tactics and communications were used. This is a sound approach to using this technology for supervision, but there are other opportunities that this technology can offer the department.

First, as it's used now, BWC videos enables EMPD supervisors to identify good and bad tactics used by officers and provide the officers with video evidence to include in training to make the job safer for all involved. Second, it enables EMPD managers to identify problematic officers that engage in poor performance when dealing with the public or handling CFS. And lastly, and where the greatest potential exists, BWCs record an enormous amount of positive and professional interactions between the police and the community. The videos also record the difficult and dangerous job the police do every day.

^{5.} https://www.mascontext.com/issues/22-surveillance-summer-14/ring-of-steel/ https://www.scientificamerican.com/article/post-911-nyc-video-surveillance/



The videos are essentially recorded evidence of police work and should be used to demonstrate to the community the good work (and the bad) that the EMPD performs. We bear witness to the sometimes shocking police use of force seemingly on a daily basis. Masked by these accounts are the millions of professional interactions that occur. The EMPD could use these recordings to educate and inform the public about the realities of police work and showcase good performance.

CPSM recommends that BWC videos could be sampled and used in partnership with the police union and community groups to get a better understanding of the encounters that officers have every day in El Mirage. Departments in the U.S. are partnering with community groups and academic institutions to rigorously assess police-community interactions. Permitting independent observers to view and assess interactions between the police and the community could reinforce police legitimacy and demonstrate the positive interactions and excellent work done by officers every day.

Technology on Patrol Recommendations:

- Employ a greater use of technology to enhance police operations (Recommendation No. 6.):
 - Develop a robust web-based reporting system for the community to report minor incidents on the EMPD website.
 - Develop a deferred reporting system.
- Deploy AEDs in as many police vehicles as feasible; at least one marked police vehicle should be equipped with an AED at all times. (Recommendation No. 8.)
- Deploy LPRs and CCTV at strategic and hot-spot locations in the city. (Recommendation No. 9.)
- Develop a system for independent review of BWC recordings as the basis for developing deeper understanding by the public and community groups of police. (Recommendation No. 10.)

SPATIAL REPRESENTATION OF DEMAND

The figures presented previously (Figures 4-1 through 4-8) provided a thorough examination of the patrol workload demands during different seasons and by the day and week. In addition to these "temporal" demands, it is also possible to illustrate the "spatial" demands on the EMPD. Examining the spatial demands permits the exploration of where incidents are occurring.

We generated maps using the CFS data we extracted from the CAD system. The maps are intended to illustrate problem areas in the city using one year of data. The goal in this section is to illustrate problematic locations in the community and the need to develop specific strategies around those locations.

As can be seen in Figures 4-9 and 4-10, there are distinct incident "hot spots" in the community. It is clear that the several of the commercial and retail areas dominate the responses by officers to both crime CFS and other CFS. This comes as no surprise, as these areas are vibrant and welltraveled parts of the community and presumably would demand a large share of attention from the police department.

Each one of the actual "hot spots" in the community should be the focus of a specific and targeted strategy that aims to eliminate, or drastically reduce, the conditions present at those locations. Undoubtedly, these locations receive the lion's share of attention from patrol officers in the department, and consideration should be given to formulating a deliberate plan to deal with these locations in a proactive fashion.

CPSM recommends taking a more strategic approach to crime at these locations. The department should create a specific strategic plan for these general locations. All of the operational resources—patrol, investigative, etc.—should be brought to bear on crime and disorder at the identified locations. Shoplifting could just be a simple juvenile prank, or it could be part of an organized ring of retail and identify theft. Police departments across the country are seeing a growing trend of gang involvement in retail and identity theft, as well as auto larceny in the vicinity of commercial hubs. A more coordinated and strategic approach to these conditions is warranted. A strategic approach will have an impact on reducing crime and be a better use of scarce patrol resources. The same approach should be taken for traffic safety.

In the area of strategic crime prevention, analysis, and prevention, "hot spot" mapping is generally considered a crude or unartful approach. There are more sophisticated and advanced methods that rely on algorithms and machine learning techniques. Predictive analytic techniques, such as PredPol, are in use in police departments around the country to drive operations. However, in a community the size of El Mirage, predictive analytic approaches might not be required. The size and scope of crime and criminal offenders is such that officers already have a good working knowledge of the conditions in the community. It's not necessary to have an algorithm predict that crime will occur at Walmart, for example. The "hot spot" maps illustrate the location and now what's needed is a plan to address problems at that location.

It is also clear that the department pays attention to those locations. Figures 4-9 through 4-12 illustrate "hot spots" of crime, traffic accidents, and motor vehicle stops. The high-frequency traffic accident locations (Figure 4-11) as compared to high-frequency motor vehicle stop locations (Figure 4-12) illustrates that the department does a good job making traffic stops at the locations where crashes occur more frequently.

Making vehicle stops at the hot spots is a good start. Applying visible patrol and traffic enforcement at hot spots is essential. But that is only part of the solution. If officers continue to check the areas and make the stops and the conditions persist, then the effort is somewhat wasted. CPSM recommends that the EMPD take a more strategic approach to these issues and enlist resources from the entire department to bring to bear on the problems. This will be discussed in the section on Traffic Enforcement.

The strategic approach mentioned here also goes hand-in-hand with the implementation of community policing. As discussed under the Community Engagement Officer section, the EMPD could leverage existing patrol resources and a strategic, community policing approach to crime and disorder. The maps that follow illustrate where problems exist. The next step is to develop the plan to address them.

Current patrol operations appear to be reactive in nature. Proactive analysis, planning, deployment, and evaluation could alter the current approach to address community conditions effectively. Instead of responding to call after call to these locations a focused plan could be implemented. Walmart, for example, is the number one location for crime CFS and community-initiated CFS in the city. Discussions with EMPD operational personnel indicate that Walmart is an excellent "corporate citizen" and works in close partnership with the EMPD on issues at that location. Nonetheless, this location generates a disproportionate amount of work for the

6. https://www.predpol.com/



department. A strategic approach to these issues could embrace the needs of Walmart and preserve patrol resources to dedicate to other areas in the community.

For example, using "payback" hours, officers could be deployed to Walmart on a regular basis to deter crime. An empty, marked EMPD vehicle could be parked at a high-visibility location for added deterrence. Regular sweeps of the parking lot could be made to search for vehicles that have expired credentials or motorists with suspended licenses. Crime prevention programs could be offered in the parking lot. Walmart Loss Prevention staff could be authorized to process misdemeanor larceny/theft arrests by preparing the necessary paperwork and forwarding it to the EMPD for execution with the City Court.

These are just a few of many elements that could constitute a strategic plan at this location. Incidents of crime would be lowered, the shopping experience would be better, and patrol resources would be used more efficiently.

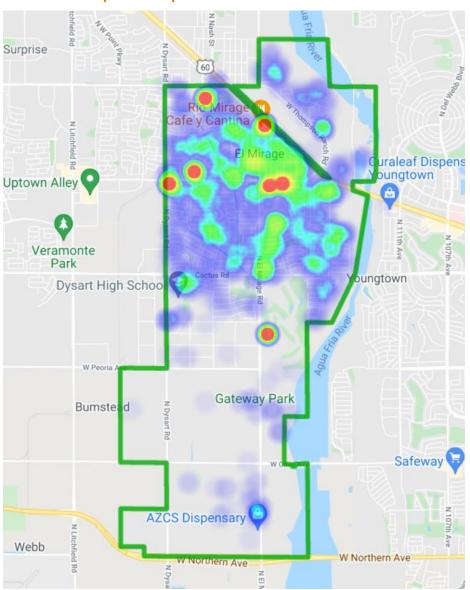
Considering that the EMPD deploys patrol officers to steady beat assignments on a regular basis, this approach could be replicated across the city. Officers assigned to each beat could be given the information about crime and disorder and community policing on their beats and be expected to develop a plan to address those conditions. This approach is impossible, of course, when officers are running from call to call and have little uncommitted time. Nonetheless, taking a more strategic approach to community problems, while simultaneously lowering the workload caused by frivolous CFS, would improve service delivery and make the police job more rewarding.

Recommendations:

Develop a strategic approach to community problems based on crime, traffic, and CFS data. (Recommendation No. 11.)

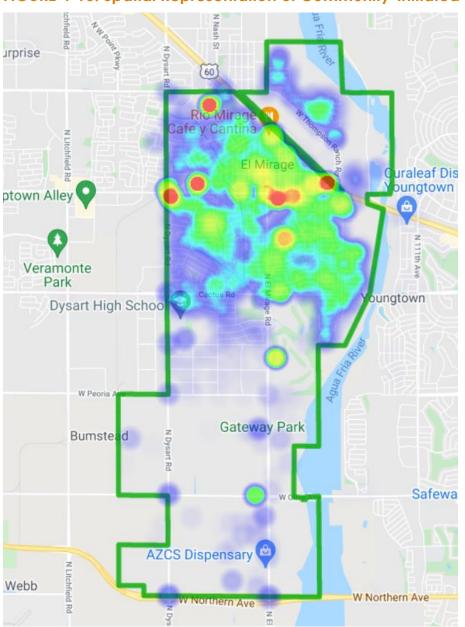
§ § §

FIGURE 4-9: Spatial Representation of Crime Calls for Service (CFS)



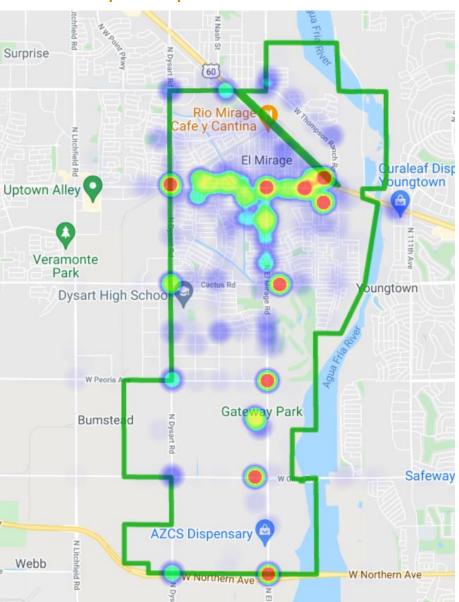
Runs	Location	Place
143	12900 W THUNDERBIRD	WALMART SUPERCENTER
33	11201 N EL MIRAGE	PUEBLO EL MIRAGE RV RESORT
30	12101 W THUNDERBIRD	FAMILY DOLLAR
28	13777 N DYSART	CIRCLE K
18	12721 W GREENWAY	ROSEWOOD ESTATES
18	12401 W CINNABAR AVE	POLICE HQ
16	12317 W GRAND AVE	SURPRISE LAWN & GARDEN
15	12235 W THUNDERBIRD	RESIDENCE

FIGURE 4-10: Spatial Representation of Community-Initiated CFS



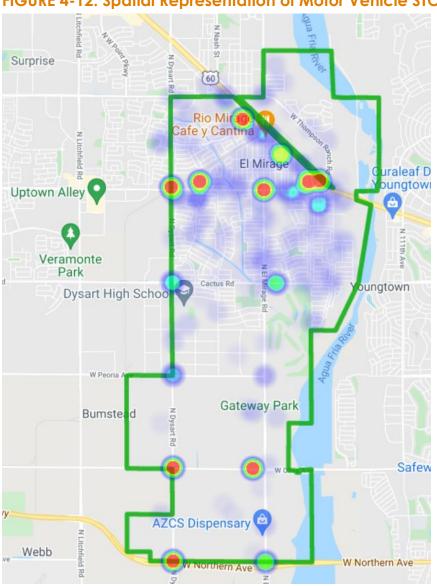
Runs	Location	Place
300	12900 W THUNDERBIRD	WALMART SUPERCENTER
275	12401 W CINNABAR AVE	POLICE HQ
166	13777 N DYSART	CIRCLE K
163	12721 W GREENWAY	ROSEWOOD ESTATES
151	W GRAND AVE & W THOMPSON RANCH	W GRAND AVE & W THOMPSON RANCH RD
133	12235 W THUNDERBIRD	RESIDENCE

FIGURE 4-11: Spatial Representation of Motor Vehicle Accidents



Runs	Location
211	n el mirage rd & w thunderbird rd; wb
204	n a St & w thunderbird rd
203	W OLIVE AVE & N EL MIRAGE RD
145	N EL MIRAGE RD & W CACTUS RD; WALGREEN
132	W THUNDERBIRD RD & N DYSART RD; J/E OF
119	W GRAND AVE & W THOMPSON RANCH RD
116	W NORTHERN AVE & N EL MIRAGE RD
114	N EL MIRAGE RD & W PEORIA AVE
102	w thunderbird rd & n luna st

FIGURE 4-12: Spatial Representation of Motor Vehicle STOPS



Stops	Location
51	W GRAND AVE & W THOMPSON RANCH RD
29	W THUNDERBIRD RD & W GRAND AC
28	W THUNDERBIRD RD & N DYSART RD
26	W OLIVE AVE & N EL MIRAGE RD; JW
22	W NORTHERN PWY & N DYSART RD
21	W OLIVE AVE & N DYSART RD
21	12900 W THUNDERBIRD RD; WALMART
20	N EL MIRAGE RD & W THUNDERBIRD RD
20	W ACOMA DR & W GRAND AC

TRAFFIC ENFORCEMENT

Traffic safety is a core mission of any police department. Complaints about traffic are generally the most frequent kind of complaint that the police receive from the public.

Every accident that can be prevented can save the community thousands of dollars in damages and liability. The department should embrace the mission of reducing accidents, reducing injuries, and saving lives through enforcement, education, and roadway improvement through engineering. Collectively, these are referred to as the "Three E's" of traffic safety.

From an enforcement perspective the EMPD has a very high level of traffic stops. Data from Table 4-2 shows a substantial number of traffic-related CFS (about 5,000 during the year studied). In addition, the figures on spatial activity indicate these stops are being conducted in the right places, but they could also be expanded to other areas of the community. The department is to be commended for such a rigorous enforcement program.

Sheer volume of enforcement, however, is not enough to improve traffic safety. In general, this enforcement should be focused on the drivers most at risk of accidents, at crash-prone locations, for violations of the law that are deemed to be causing those accidents. In other words, random or unfocused vehicle enforcement is inefficient; however, a targeted approach can yield substantial gains towards traffic safety.

An opportunity exists to leverage the robust enforcement already being conducted in El Mirage towards a more focused approach to traffic safety. CPSM recommends that traffic safety become an integral part of the strategic plan for all patrol officers. The sergeants should coordinate the efforts in this area and leverage the efforts of the entire patrol function. Using personal injury accidents as the outcome measure, the EMPD should embrace a comprehensive approach focusing on the "Three E's": Enforcement, Education, and Engineering.

Enforcement should continue to be focused at high-frequency crash locations. In addition, the EMPD should maintain a list of high-risk drivers (repeat DUI, etc.) and target these individuals for enforcement.

Traffic safety education and accident awareness should be developed more strategically by the EMPD. Again, targeting at-risk drivers (high school students for example), safe driving courses can be developed and delivered to these individuals. The EMPD could also consider deploying variable message signs at high-frequency crash locations to warn motorists about the dangers present in the area. The city might consider traffic safety education instead of monetary fines for first-time violators from high-risk groups. Communities around the country are benefiting from offering such educational programs to reduce accidents and injuries.

Lastly, the city's Department of Transportation could work with the EMPD to explore roadway redesign and signage. Making engineering changes to existing roadways is a challenge. Many roads are controlled by the state and making changes to county and city roads can be expensive and take a lengthy amount of planning. However, sometimes simple adjustments such as signage can be effective.

CPSM is not an advocate of one method over another. The point is that traffic accidents need to be looked at from a strategic perspective with goals and plans identified and communicated throughout the department.

Traffic safety could be a good opportunity for EMPD personnel to engage the organized community by attending meetings to deliver traffic safety information. As the EMPD embraces community engagement as part of its strategic approach to public safety, traffic education and safety should be a natural part of that approach.

Part of the traffic safety strategy must also include careful attention paid to the demographics of motorists stopped. Not only is it important that enforcement be focused, it must be free from discrimination and bias. The EMPD should begin to record the gender, race, and age of every motorist stopped in the city. An analyst would then be responsible for collating, analyzing, and reporting on the demographics of motorists stopped. This information should also be analyzed for patterns and trends to identify any racially disparate stops. The information should also be publicly reported on at least an annual basis.

Traffic Enforcement Recommendations:

- Develop a Traffic Safety Plan. (Recommendation No. 12.)
- Employ the Three E's of traffic safety throughout the department. (Recommendation No. 13.)
- Minimize focus on random and routine traffic enforcement. (Recommendation No. 14.)

§ § §

INVESTIGATIONS BUREAU

The Investigations Bureau is supervised by a sergeant, who reports to a lieutenant who also has patrol shift commander responsibilities. The lieutenant reports to the Assistant Chief of Operations. The sergeant manages day-to-day operations with a staff of four full-time sworn detectives, one part-time civilian detective, one full-time analyst, and one full-time court liaison. Detectives are selected through a competitive process. Once they are assigned they are not subject to a rotation policy; the detectives can stay in Investigations for the remainder of their careers. Each detective has various cases to manage, from property crimes to homicide. All detectives operate as general detectives; there is no specialization. Each detective is currently working on at least one homicide.

Schedule and Workload

The detectives work a four-day, ten-hour schedule. Two detectives have Mondays off, and two have Fridays off; this schedule provides detective coverage Monday through Friday from 7:00 a.m. to 5:00 p.m. The detectives rotate on-call duties with one detective on call for a week at a time. The sergeant is on call every day. Each of the sworn EMPD employees in detectives has an increase in their wages while assigned to detectives to compensate for on-call responsibilities.

Cases are forwarded to detectives by the patrol sergeants, who review and approve all patrol reports. All felony cases not cleared by arrest are forwarded to detectives for review. Misdemeanor cases without follow-up are sent to detectives. Misdemeanor cases with workable leads are held and worked by patrol officers. The cases are assigned by the Investigations sergeant, who reviews every case sent to detectives. Each detective averages around 25 open cases at one time. Cases are assigned electronically in the department's records management system. The cases are categorized in the following categories:

- Active Follow-up is needed.
- Inactive No follow-up necessary (no workable leads).
- Closed After disposition from County Attorney.
- Pending Case is inactive awaiting trial, lab results, or some other process.
- Cold case Serious felony cases where there are no active leads.

The Investigations sergeant meets with the team every Tuesday to go over the significant open cases. The sergeant receives updates, provides direction, and assists in setting priorities for the week. The sergeant uses an Excel spreadsheet he shares with the lieutenant in weekly meetings to keep track of open cases. This system seems to work reasonably well to track the significant open cases but requires the sergeant to pull data from the RMS system and put it into a spreadsheet. The method is not used to track other "minor" open cases, nor does it utilize autoupdate features offered in the RMS system. The management and tracking process is not backed by written standards or policy. Due to detectives' unique work and autonomy, CPSM recommends written guidelines for detectives be developed in the form of either standard operating procedures or a Bureau manual.

The RMS system has robust capabilities that are not currently being used for case management, which can result in cases slipping through the cracks. There seems to be a lack of in-depth knowledge of the RMS system. This lack of knowledge was observed elsewhere during the site visit when we learned the Records supervisor acts as the department's RMS administrator by default. Our observations in the Investigations Bureau support a recommendation for the

department to have a dedicated position for IT who can help develop the available tools in the RMS and other software platforms used by the department.

There are no absolute standards to determine appropriate caseloads 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 minor theft cases in a similar period. Nonetheless, the International Association of Chiefs of Police (IACP) suggests that a detective caseload between 120 and 180 cases per year (10 to 15 per month) is manageable. Although exact assignment data was not available, it appears, based on the overall UCR crime numbers, the department assigns approximately 89 cases per month, or roughly 22 per investigator. This caseload would be considered high, particularly when EMPD detectives are each responsible for investigating violent crimes.

During the site visit, CPSM heard anecdotal accounts that detectives have too many workable leads to follow up on and is must consistently prioritize what to investigate on a weekly and daily basis. This compromises investigative effectiveness and undoubtedly results in lower case clearances, arrests, and successful prosecutions. CPSM recommends adding a detective to the Investigations Bureau as soon as practical to reduce the caseload to a more manageable level. Adding one detective would take the average monthly cases down to 18 cases per month.

TABLE 4-12: Current and Proposed Detective Staffing and Caseload

Number of Sworn Detectives	EMPD Crimes per month	Crimes Monthly per Detective		
4 (current)	89	22		
5 (proposed)	89	18		

The landscape for police detectives has changed significantly over the last five to ten years with the proliferation of mobile devices and social media. Criminal offenders utilize these tools daily, just like most law-abiding people in society. Devices and apps often contain evidence of crimes. Consequently, a typical felony case may require from one to four search warrants to access a phone and social media accounts. These search warrants are time-consuming to develop and the search results often need expert data analysis. Previously, most of these cases did not require a search warrant, and this type of evidence did not exist.

Current prosecution standards now require this type of evidence in many cases. The Investigations Bureau lacks personnel dedicated to digital evidence analysis. One of the detectives handles digital evidence downloads and analysis as a collateral duty. Obtaining and extracting the data in useable terms is very technical and requires specialized software and training. This collateral duty arrangement is not enough to keep up with the ever-increasing demand to analyze digital evidence for serious crimes. CPSM recommends EMPD add one additional civilian investigator who would focus on obtaining and analyzing digital evidence as well as assist with lower-level investigations. The additional assistance with lower-level cases will also help improve the heavy caseload of the sworn detectives.

During our site visit, we also learned of an accumulation of older felony cases that may have workable lead information or need to have DNA pulled out of evidence and submitted to the lab for processing. These older cases have been worked intermittently when detectives have time, but not enough headway is being made. The challenge is that as these cases are pending, new cases are coming in, taking all available time from the current detectives assigned to the unit, and the backlog continues to grow.

CPSM recommends resources be explicitly dedicated to these older "cold" felony cases, including aggravated assaults, robberies, sexual assaults, and homicides. These resources can be full- or part-time contract investigators, or the department could add two full-time sworn detectives to the unit dedicated solely to working the older cases. Many agencies use retired detectives or other contract detectives for cold case investigative work to manage the costs more effectively.

Clearance Rates

CPSM maintains that while preventing a crime is of utmost importance to any law enforcement agency, solving crime should have parity. The solving of crimes that result in the prosecution of offenders prevents future crimes and provides much-needed closure to crime victims. As defined and measured by the FBI Uniform Crime Report (UCR), clearance rates are the benchmark for a department's effectiveness in solving crimes.

The UCR establishes strict three-prong criteria for clearing a case. For UCR 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. Convictions or acquittals are not factored into clearance rates.

EMPD clearance rates for 2019 and 2020 are shown in the following tables. During the site visit, CPSM learned some personnel changes and additions to the department have had a positive impact on clearance rates. There was a noticeable improvement in clearance rate numbers from 2019 to 2020. Adding the recommended personnel to investigations should continue the positive trend in clearance rates.

Although the department tracks its overall clearance rates, it does not track them by detective. CPSM recommends utilizing the case management system to track each detective's clearance rate and to generate reports for supervisory review. The metric of individualized clearance rates will assist in evaluating individual detective performance.

TABLE 4-13: Reported El Mirage, Arizona, and National Crime Clearance Rates, 2019

Crime	El Mirage			Arizona			National		
Crime	Crimes	Clearances	Rate	Crimes	Clearances	Rate	Crimes	Clearances*	Rate
Murder Manslaughter	2	1	50%	375	228	61%	14,325	8,796	61%
Rape	22	1	5%	3,455	534	15%	124,817	41,065	33%
Robbery	14	3	21%	6,213	1,715	28%	239,643	73,091	31%
Aggravated Assault	46	15	33%	21,049	10,242	49%	726,778	380,105	52%
Burglary	362	25	7%	26,765	2,976	11%	981,264	138,358	14%
Larceny	523	147	28%	122,918	23,388	19%	4,533,178	834,105	18%
Vehicle Theft	97	7	7%	17,037	2,115	12%	655,778	90,497	14%

TABLE 4-14: Reported El Mirage, Arizona, and National Crime Clearance Rates,

Crime	El Mirage			Arizona			National		
Crime	Crimes	Clearances	Rate	Crimes	Clearances	Rate	Crimes	Clearances*	Rate
Murder Manslaughter	4	2	50%	432	292	69%	18,109	9,851	54%
Rape	25	5	20%	2,838	371	13%	110,095	33,689	31%
Robbery	11	3	27%	5,739	1,511	26%	209,643	60,377	29%
Aggravated Assault	66	43	65%	19,751	8,112	41%	799,678	371,051	46%
Burglary	131	14	11%	21,390	2,744	13%	898,176	125,745	14%
Larceny	579	162	28%	111,631	19,281	17%	4,004,124	604,623	15%
Vehicle Theft	93	16	17%	15,806	2,074	13%	727,045	89,427	12%

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

Detective Training

There is no formal training program for detectives. New detectives receive on-the-job training from other detectives and the sergeant. They are also sent to topical seminars and courses when possible.

There are several types of detective training programs employed by other agencies. Many agencies have a formal field detective training program, a training checklist for new detectives, or types of cases for new detectives to accomplish in a set amount of time. CPSM recommends EMPD research other agency detective training programs and develop a formal detective training process that works best for the department.

A new detective was recently transferred into the unit and will specialize in child sex crime cases. This detective is currently scheduled to attend training and will be the case agent for future child sex crime cases. When possible, all detectives will attend the Homicide Investigators Association training. The training and development of detectives should be more strategic, with specialized training assigned by the sergeant to meet the unit's needs. Serious violent crimes, including homicides, are assigned based on the on-call detective rather than a detective's expertise and training, CPSM recommends a more systematic method of developing specialties and expertise in the Bureau and assigning cases accordingly.

In addition to training for specialty expertise, EMPD should be more focused on succession planning for detectives. Succession planning in technical areas such as investigations is often tricky due to minimal resources in a department the size of El Mirage. However, EMPD employee development for succession planning is possible with long-term commitments, even with limited resources. Currently, there is no rotation in detectives; once a person becomes a detective, they can remain in the position until retirement. In an agency the size of El Mirage, the experience often becomes very concentrated in one or two individuals. CPSM recommends some sort of rotational positions be adopted for investigations. Rotations can be accomplished through labor negotiations and attrition. Many agencies of similar size assign a permanent position or two to homicide investigations and then rotate the other disciplines every five years. This model allows for specific expertise to be developed for more complex investigations while adding career development opportunities for others.

Also, to assist with succession planning, it is recommended that EMPD consider adding a temporary detective program. A temporary detective program would involve selecting a patrol officer to be temporarily assigned to detectives for a period of from 6 to 12 months. The assigned officer would assist detectives by carrying cases, and they would gain valuable knowledge and skills to take back to and be employed in patrol. This type of program would enable the department to train more officers and prepare them for future opportunities in detectives. In addition, it would help ease the workload of the full-time detectives and would spread investigative skills throughout patrol.

The Bureau will also be gaining a new Neighborhood Enforcement Team (NET) later in the year. The team will consist of three officers and one supervisor. This unit will be a proactive unit that can work in uniform or plain clothes. The unit will work to develop their cases in high crime areas and assist detectives with follow-up on cases. This unit could also carry a few lower-level cases if necessary and help relieve the caseload on the current staffing in detectives. The sergeant will also be trained to cover supervisory responsibilities for the detectives and share the callout load with the current sergeant, who is on call every day.

Task Forces

EMPD has two full-time officers assigned to task force positions. One officer is assigned to the Gang and Immigration Intelligence Team Enforcement Mission (GIITEM, and the other is assigned to a federal Drug Enforcement Administration Agency (DEA) task force. Both of these officers report to the detective sergeant.

Each officer assigned to a task force works cases both inside and outside the City of El Mirage. The task forces have repeatedly brought additional resources to El Mirage to assist with drug and gang cases. The case of recent shootings targeting EMPD officers was an example of the forcemultiplying effect of the task force positions. Task force officers from other agencies were brought into El Mirage and ultimately assisted in apprehending the perpetrator who had been shooting at El Mirage officers. The department believes it gets a great deal of return on its investment in these officers when it needs assistance. It also considers the relationships with the state and federal agencies invaluable. The assignments seem to be working well for the Department. There are no recommendations in this area.

Investigations Bureau Recommendations:

- Provide training and technical support for the sergeant and lieutenant to better utilize available automated tools in the RMS system to assist in the supervision of the case management process. (Recommendation No. 15.)
- Develop SOPs or a Bureau Manual to standardize operations and increase efficiency and accountability. The guidelines would standardize case assignments, case management, training, and other procedures. (Recommendation No. 16.)
- Add one full-time detective to the Bureau to reduce the current caseload of the four sworn detectives assigned. (Recommendation No. 17.)
- Add a full-time civilian investigator to manage seizure and analysis of digital evidence. (Recommendation No. 18.)
- Explore the addition of contract investigators to work the older "cold" cases that have workable leads. (Recommendation No. 19.)



- Utilize the RMS case management system to track individual detective caseloads and clearance rates. (Recommendation No. 20.)
- Research other law enforcement agency detective training programs and develop a formal detective training process. (Recommendation No. 21.)
- Develop investigative specialties within the detective ranks. With the current workload of EMPD detectives, they cannot each possibly develop expertise for investigating all types of serious crimes. Homicides, sexual assaults, domestic violence, and other crimes require targeted training and experience, which is impossible to develop while working 25 open cases a month. (Recommendation No. 22.)
- Implement a program to rotate patrol officers in and out of detectives on a periodic basis. (Recommendation No. 23.)

§ § §

SECTION 5 ADMINISTRATIVE

MANAGEMENT AND STRATEGIC PLANNING

At the time of the CPSM site visit, the department did not have a multiyear strategic plan in place. Nevertheless, the EMPD is currently operating under an overarching management strategy that has been communicated by command staff and certainly approaches and accomplishes its work in a strategic manner. What is lacking is a formal, written plan or document to guide and evaluate these efforts. However, the command staff have expressed a strong interest in developing a written strategic plan and a considerable amount of work has been done to prepare the department for engaging in this type of formal strategic planning process.

It is clear that the command staff of the EPD understand and embrace a 'proactive' and strategic orientation towards their work. A strategic approach to work, and a belief in data as a strategic asset, are the characteristics that define effective police departments and distinguishes excellent departments from their peers. CPSM has encountered scores of departments the size of the EMPD that do not understand or embrace the concept of strategically planning and measuring their operations. Many times, these are excellent departments that simply require more forward-thinking leadership.

The EMPD, by comparison, obviously understands and embraces a proactive stance towards its work. The current lack of a formal written strategic plan is therefore not a deficiency, but an opportunity that should be pursued.

It has been CPSM's experience that most American police departments of the EMPD's size do not currently have multiyear strategic plans as described above. Nevertheless, American policing has changed dramatically in recent years. All departments are now held to a higher standard of transparency and accountability. As such, we believe that strategic plans are a necessity. (see, for example, Final Report of the President's Task Force on 21st Century Policing) It is recommended that the department begin the process of formulating such a plan now.

We recommend that the department develop a comprehensive written strategic planning document that includes specific goals and objectives for the department, as well as all operational units. Once it is developed and properly vetted, this plan should be broadly communicated within the department and throughout the community.

The consultants reviewed the department's policies and procedures. They were generally found to be comprehensive and appropriate. Policies on high-liability/low-frequency activities such as vehicle pursuits and use of force were found to be clear and are consistent with best practices in American policing.

We note, however, that a number of policies were actually copied from the policies of other police departments in the region, as opposed to being developed internally by members of the department. As such, a number of the current policies make reference to procedures or positions that are not relevant to the EMPD. For example, SOPs concerning clandestine drug labs are not currently relevant in El Mirage. We were advised that the department is well aware of this limitation and is currently in the process of reviewing and revising all SOPs as necessary. A number of supervisors (i.e., lieutenants) have been assigned specific SOPs to review and revise. The command staff are ultimately responsible for approving any edits or revisions. The department is also reviewing and considering policies recommended by a private firm, Edwards

and Amato. CPSM was advised that the department is planning to assign the SOP review and revision function to one member of the department.

The department's records management system (RMS) and computer-assisted dispatch (CAD) system are used to track the activity of patrol officers. Summary data is reviewed by officer and by squad. Each month, sergeants and lieutenants are provided performance data for all patrol officers. Summary performance data for the Investigations Bureau, including number of unit and individual assigned cases, active cases, cleared cases, final disposition of filed charges, etc., is provided to the Chief on a monthly basis (for example, memorandum dated January 31, 2022).

Annual performance reviews are prepared for all personnel.

The department's practices for promotion in rank were reviewed and found to be appropriate. In the past the department has utilized a written examination for promotion to the rank of sergeant. That practice has recently been discontinued and replaced with a process of "inbasket evaluation," community engagement, live action scenarios, and an oral board.

The consultants reviewed the department's policies and practices for administering extra duty details and found that they meet or exceed those of similarly sized American police departments.

The department actively tracks and reports its ongoing overtime expenditures. CPSM reviewed available overtime data and noted a spike in 2021 related to the series of shooting attacks directed at EMPD officers. Irrespective of this unprecedented event, CPSM believes that there are proper mechanisms in place within the EMPD to adequately monitor and reduce unnecessary overtime expenditures. Reduction of overtime costs should continue to be an important performance metric for the EMPD.

Strategic Planning Recommendations:

- CPSM believes that the department is presently well-positioned to begin the process of developing a multiyear strategic plan. We believe that the department should begin to work with internal and external stakeholders to develop and publish a multiyear strategic plan (as opposed to the cursory annual plans required by accreditation authorities). It is imperative that the department develop reasonable and attainable performance goals as well as mechanisms for tracking the relative degree of progress in achieving these goals from year to year. The development of a functional strategic plan should be a thoughtful and inclusive process. (Recommendation No. 24.)
- The department should continue to prepare and publish comprehensive annual reports. Annual reports should not, however, simply contain aggregate data for work performed during the previous year. Annual reports must make explicit reference to the department's overall strategic plan. Specifically, annual reports should contain stated goals and objectives that have been identified for the period in question and should demonstrate the relative degree of progress/success the department has had in achieving each of these goals. (Recommendation No. 25.)
- Senior staff should look to the accreditation guidelines of the Commission on Accreditation for Law Enforcement Agencies (CALEA) for guidance in incorporating the above recommendations and designing its new performance measurement system. CPSM recommends that the department seek and obtain accreditation by the ALEAP. We believe that the department is currently well positioned to obtain such accreditation in the near future. (Recommendation No. 26.)

Fiscal Management

The EMPD's budget for FY2020 was \$9,945,000 in FY2020. Of this total, \$7,731,500 was for personnel services, including \$4,720,000 for wages and salaries and \$300,000 for overtime. Without context, these figures are difficult to understand.

In 1997, a group of police chiefs from around the country established the benchmark cities survey, which was created as a measurement tool to help police managers understand their operations better and evaluate how they compare to other departments. The Overland Park, Kan., police department took the lead and administers the annual "Benchmark Cities Survey" of peer police departments. This survey collects data on hundreds of key variables. Most useful for this discussion is cost of services, including overtime. The following table shows a comparison of El Mirage's fiscal management to the averages from the participating cities in the benchmark survey.

This comparison is favorable to El Mirage. The community spends less per capita for police services, has a lower than expected rate of overtime expense, and with 58 sworn officers as of November 1, 2021, deploys fewer officers per capita than expected. Additionally, the department has a lower percentage of spending on personnel services, which indicates a higher than expected investment in non-personnel items. This translates into a higher level of expenditures on facilities, vehicles, equipment, etc. Essentially, officers in the EMPD would likely have better, newer and a wider array of equipment for them to deploy and enhance service delivery.

TABLE 5-1: El Mirage Police Department in Perspective

Benchmark Area	EMPD	2020 Benchmark Cities Survey	Vs. 2020 Benchmark Cities Survey
Per capita police spending	\$278	\$299	LOWER
Personnel Budget (% of total)	77.7%	82.1%	LOWER
Overtime Cost % of Personnel	3.9%	4.2%	LOWER
Citizens per Officer	617	736	LOWER

Overall, the EMPD earns high marks for financial benchmarks. The cost of operations appears very efficient.

The key to operational efficiency, however, is not found exclusively in financial austerity. The size and style of a police department and the types of services that it provides are a reflection of the character and demands of that community. The challenge is to determine how many police officers are necessary to meet that demand, and how to deploy those personnel in an effective and efficient manner.

PROFESSIONAL STANDARDS UNIT (INTERNAL INVESTIGATIONS)

The internal investigations function for EMPD is administered by the Assistant Director of the Administration Division. The Deputy Director receives all formal citizen complaints and internally generated complaints. Once an incident or case is determined to warrant an internal investigation, the Assistant Director will assign a person to conduct the investigation. On occasion, the Assistant Director will do the investigation himself if the allegations are significant. The more minor or routine investigations are assigned to first-level supervisors, while a lieutenant or the Assistant Director will handle the more complex or serious cases.

The policy governing internal investigations is covered in Policy 5.01: Investigations. The policy is comprehensive and covers the fundamentals of the internal investigations process. The following table shows the possible dispositions for internal investigations conducted by the department.

TABLE 5-2: Complaint Dispositions Used in the EMPD

Unfounded	The reported misconduct did not occur or did not occur as alleged.	
Exonerated	The incident occurred, but the conduct was lawful and proper.	
Not Involved	The employee was misidentified or not involved in the alleged incident.	
False Complaint	The allegation was made to impeach the honesty, integrity, or reputation of or cause injury, duress, or hardship to the employee, Department, or the City of El Mirage. With the approval of the Police Chief, an investigation resulting in a finding of "false complaint" may be submitted to the appropriate prosecuting agency for review of possible criminal charges.	
Not Sustained	There is insufficient evidence to prove or disprove the allegation.	
Sustained	The allegation is supported by sufficient evidence to justify a reasonable conclusion that the alleged misconduct occurred.	

Policy 5.01A: Discipline governs the administrative discipline process. The discipline policy includes provisions for classifications of misconduct offenses and guidelines for employee discipline. The discipline policy also contains requirements for when and how to establish a Conduct Review Board (CRB) for severe discipline cases. These types of policy provisions, outlining specific classifications of misconduct, prescribing the amount of discipline, and the process for administering discipline are typically effective for ensuring equitable employee discipline.

The Assistant Director prepares an annual summary report that includes data on administrative investigations and other functions overseen by the Professional Standards Unit. This report provides comprehensive data on supervisory inquiries, internal investigations, use of force incidents, vehicle pursuits, injury reports, and traffic accidents. The following table shows the dispositions of internal investigations from 2019 and 2020.

TABLE 5-3: Dispositions of Internal Investigations, 2019 and 2020

Professional Standards Administrative Investigation Findings	2020	2019
Total Incidents	9	8
Total Allegations	16	21
Exonerated	0	0
Unfounded	1	0
Not Sustained	1	0
Sustained	10	19
Pending	4	2
Resigned Prior to completion	0	0
Professional Standards Administrative Investigation Discipline	2020	2019
Termination	0	0
Resigned / Retired	1	0
Demotion	1	0
Suspension	1	6
Letter of Reprimand	4	0
Additional Training	1	2
Pending	3	2

Overall, the internal investigation process for EMPD is comprehensive and mostly meets industry standards. That said, while there is a process for tracking official complaints, there is no process for tracking supervisory inquiries. Many issues that might start out as a potential complaint against an officer are resolved when a supervisor meets with the complainant, explains the policy involved, or reviews the body-worn camera footage. These are considered supervisory inquiries and often get resolved by the supervisor but are not tracked.

The low ratio of unfounded complaints compared sustained allegations is not what CPSM typically sees in other agencies. The fact that inquiries are not tracked unless they become an "official complaint" may indicate that some inquiries should have been handled as complaints or investigated further. Without a tracking system for these supervisory inquiries, there is no way to determine if the inquiry was indeed an inquiry or should have been investigated further as a complaint. Adding a tracking system for supervisory inquiries will help gather data and allow for the review of allegations by management to verify which ones were complaints and which ones were legitimate inquiries. A tracking system would add accountability along with a check and balance to those handling inquiries to ensure they all are investigated and documented properly.

Another function of the Professional Standards Unit is to track use of force incidents. During the onsite visit, CPSM consultants reviewed all use of force reports from 2018 through 2020. In 2019, there was a change in the forms used and the data captured. The form and investigative process changes improved significantly with the change implemented in 2019.

Each use of force requires a sergeant to conduct a review and complete a multipart report submitted through the chain of command to the Police Chief for final review. The reports are completed on PDF forms, and the process appears to be cumbersome and inefficient. Some supervisors complete the form electronically and others complete the form on paper. The paper copies flow through the chain of command and require supervisors and managers to sign the paper copies, which end up in the Professionals Standards Unit office once approved. The data

from the report is then entered into an Excel spreadsheet for tracking purposes and summarized in the annual Professional Standards report. The following table illustrates the EMPD use of force incidents for 2019 and 2020.

TABLE 5-4: Use of Force Incidents, 2019 and 2020

Description	2020	2019
Use of Force Incidents	85	71
Total Number of Officers Involved	40	32
Calls for Service	14,365	14,900
Total Arrests	1,339	1,935
Sworn Full-Time employees	51	51
Use of Force Resulting in Injury (citizen)	20	21
Use of Force Resulting in Injury (officer)	9	5
Use of Force Resulting in Death	1	0

In addition to traditional use of force definitions (deployment of OC spray, personal weapons, batons, ECW, etc.) EMPD reviews and reports as a use of force when an officer removes their firearm from the holster in response to a perceived threat. Given the definitions and categories of use of force that the EMPD uses, the total number of use of force incidents appears to be about what CPSM sees in similar agencies with similar crime numbers and reporting standards. The following table shows EMPD uses of force by type for 2019 and 2020. The use of force employed most often was the display of a firearm, which many agencies do not even track specifically as a use of force.

TABLE 5-5: Use of Force by Type, 2019 and 2020

Use of Force Type	2020	2019
Canine	9	13
Chemical Agents	0	0
Control Holds	21	26
Countermoves	0	5
Taser	25	18
Firearm	40	28
Impact Weapon	0	2
Less-Lethal Impact	2	1
OC Spray	1	1
Pain Compliance	2	4
Takedowns	23	24
Other	3	1
Total	126	123
Discharge of Firearm	2020	2019
Intentional	3	1
Unintentional	0	0
Accidental	0	0

Data regarding administrative investigations, public complaints, and uses of force are valuable as a risk management tool to identify training needs, performance deficiencies, or patterns of

misconduct. Although EMPD tracks a good deal of data manually, valuable pieces of data are likely not being captured.

Many departments have turned to software systems to assist in this critical management responsibility. Although there are several systems on the market, IAPro, with its Blue Team feature, is one of the industry leaders. IAPro or similar software packages can be used to track very important information, including personnel complaints, use of force incidents, traffic accidents by officers, and personnel commendations. These systems also have an early warning system to alert managers to potential problems based on real-time data. CPSM recommends EMPD examine available software tracking systems and implement a means to track and evaluate more comprehensive data on uses of force for risk management purposes. Regardless of the software system, once the data is captured, the department should also devise a process to assess the data for training needs or policy changes.

Professional Standards Unit (PSU) Recommendations

- Create a system for tracking supervisory inquiries made by citizens. (Recommendation No. 27.)
- Evaluate available software systems for tracking public complaints, personnel investigations, and uses of force. (Recommendation No. 28.)
- Devise a formal process for an annual evaluation of all risk management data, including pursuits, uses of force, traffic accidents, and other incidents that may incur liability for the City of El Mirage. This review should specifically focus on identifying possible training and policy needs or improvements and be reviewed by the command staff. (Recommendation No. 29.)

CRIME ANALYSIS

The EMPD does not currently have a Crime Analysis position. The analytic intelligence function is performed by a Police Analytical Research Coordinator assigned to the Investigations Bureau. This is a non-sworn, full-time position. Prior to having its own designated crime analyst, the EMPD would outsource the intelligence function to the DPS.

The current analyst arrived at the department in October 2021. Her primary customers are members of the Investigations Bureau; however, patrol officers utilize her services as well. Since joining the department she has developed a standardized research request process to track a record of requests, responses, and summaries. Responses are e-mailed to EMPD personnel. The analyst is also available to assist with developing investigations or to perform contemporaneous research during investigative interviews.

The analyst has created databases for public utilities, telephone records, credit cards, etc. Crime bulletins and alerts from other agencies are transmitted throughout the department by the analyst (e.g., BATF Intelligence Bulletin regarding Forced Reset Trigger Machineguns and City of Glendale Crime Bulletin concerning Burglary from Cemetery and Felony Criminal Damage). Detectives appear at roll call briefings to personally share alerts and intel with patrol officers. Monthly statistics are compiled for the number of name checks, address checks, and vehicle and phone checks performed.

As mentioned elsewhere in this report, the department's use of GIS mapping software is limited. Several years ago, the department did employ a Crime Analyst who would produce weekly maps that would indicate the locations of burglaries, graffiti damage, and auto thefts that occurred over a four-week period. This position was eliminated in 2015 and such maps are no

longer being prepared. Heat maps were prepared recently to analyze patterns of vehicle catalytic converter thefts.

Crime Analysis Recommendations:

- The Police Analytical Research Coordinator) must become an active participant in all supervisors' meetings and a partner in all planned investigative and tactical operations. It is imperative that the Police Analytical Research Coordinator receive timely and accurate feedback concerning all tactical plans that are formulated as a result of the information that he/she provides. The analyst should continue to actively participate in professional development and should reach out to the International Association of Crime Analysts (IACA), the COPS Office, the Center for Evidence-Based Crime Policy, the International Association of Directors of Law Enforcement Standards and Training (IADLEST), the BJA National Training and Technical Assistance Center (NTTAC), and NIJ's CrimeSolutions.gov for effective, free support in developing and maintaining analytical skills. (Recommendation No. 30.)
- The analyst should be more fully utilized and supported so as to provide more predictive (as opposed to reactive) research products to members of the EMPD. (Recommendation No. 31.)

PROPERTY AND EVIDENCE

Workload and Staffing

The Property and Evidence Unit is physically located in a warehouse-style room on the west side of the police station. The unit is open to the public for property releases Monday through Thursday, 7:00 a.m. to 5:00 p.m. The unit is staffed by a Property and Evidence Technician who manages all of the property taken in by the department and who has numerous other collateral duties. These include:

- Ordering and issuing police supplies.
- Calibrating DUI breath machines.
- Conducting e-traces on all firearms in evidence.
- Test-firing all seized weapons and processing the results for NIBINS.
- Processing discovery requests from the County Attorney.
- Copying and redacting digital evidence for discovery (CAD, BWC, 911).
- Processing crime scenes and property during search warrants.
- Mobile Command Post driver.

The primary duties of the technician revolve around the secure intake, storage, and disposition of property and evidence taken into the department's possession. With the number of items of property and evidence brought into the unit and all of the collateral duties assigned to this sole technician, the work generated is substantial. The volume of work being conducted is certainly not sustainable over time. The department has used light-duty personnel temporarily assigned to the unit to ease the burden, and a significant amount of overtime has been expended just to get regular duties accomplished. The following table summarizes the work conducted by the Property and Evidence Technician in the past year.

TABLE 5-6: Property and Evidence Activity, 2021

Property Processed In	Property Processed Out	E-firearm Traces	Discovery Requests	Off-Duty Call Outs	NIBIN Test Fires & Entries
4,360	5,165	142	227	54	101

Although some of the purging during the year was accomplished by light-duty personnel, the technician performed the other duties listed. There is no backup for the one technician, who is constantly juggling responsibilities. Although every person we spoke to during the site visit about the property room commended the Property and Evidence Technician, it is not realistic to expect him to be able to sustain the large volume and variety of work. CPSM recommends the department add another full-time Property and Evidence Technician as soon as practical.

The capacity of a property room often depends upon the agency's ability to release property to its rightful owners and process property for auction or destruction. There will always be evidence of serious crimes that must be held for many years, but most property brought into a property room can be disposed of within a much shorter time. The challenge often is having the staff time available to identify the eligible property and adequately process the dispositions.

EMPD has done a very effective job at purging property, especially given the limited staff of one person. The department has accomplished this by assigning light-duty personnel to the unit to assist with the purging process whenever light-duty people are available. The following table lists the amount of property taken in for 2020 and 2021 and the property purged during the same periods. In both years there was slightly more property disposed of than was brought into the warehouse. This purge rate was one of the many observations that indicated to us the Property and Evidence Unit is well-managed during the site visit.

TABLE 5-7: Property Volume Processed in Property and Evidence

Year	Property Items In	Property Items Out	
2020	5,217	5,328	
2021	4,360	5,165	

Property Intake

The property intake is handled in an area just outside the secure warehouse. There are secure lockers and cold storage for officers to impound property and evidence securely anytime, day or night. A packaging area includes space and materials for officers to package evidence. A comprehensive packaging manual instructs officers on how to package a wide array of different types of property. There is Narcan stored on a wall in the packaging area if an officer becomes exposed to Fentanyl. There is no first aid kit or eyewash station in the packaging area. For the safety of officers packaging materials for impounding, CPSM recommends a first aid kit be installed, and further recommends the department evaluate the feasibility of installing an eyewash station in the intake area.

Security

The property and evidence area is alarmed separately from the police station and secured by electronic locking mechanisms with key fob access. The access is limited to the Property and Evidence Technician and can be overridden manually in case of emergencies with a master

key secured in the watch commander's office. There are separate rooms outside the main warehouse to store wet material that needs to be dried and for bulk temporary storage of evidence. These rooms are open when available and locked after the property is placed inside. The access key to these rooms is secured in the property warehouse. The outside entrance area, including these rooms, are monitored and recorded by surveillance cameras. The intake area is also covered with a camera.

Visitors must sign in to a written log to enter the property warehouse. Firearms, drugs, and currency are secured separately in rooms or cage areas that have additional manual locking mechanisms. The Property and Evidence Technician holds the only keys to these areas. Several cameras are strategically installed on the main entrance, drug room, money safe, firearms, and cold storage area.

Storage

The warehouse is well-maintained, organized, and clean. The general property storage area consists of rows of several fixed shelves. The evidence is packaged, barcoded, and stored in bins by shelf location and bin number. However, there is little available storage space remaining; the shelves will soon be at capacity. A movable/collapsible shelving system would add two to four additional rows of shelving, allow the shelves to extend higher, and add space for several thousand more items. CPSM recommends the department start planning and budgeting to upgrade the storage area with movable shelving system to avoid running out of room.

Several of the segregated storage areas appear to have the capacity for additional property. However, the narcotics room is currently near capacity. Since the room is separately secured and in a confined space, creativity with storage is limited. If the department were to have a significant seizure of drugs tomorrow, there is a risk of insufficient space to store the evidence securely. CPSM recommends the department begin to evaluate solutions to the capacity issue in the drug room. There is enough total space available in the warehouse that the narcotics area could be relocated inside the warehouse with modifications made for security.

There is an outside storage area secured by a chain-link fence for bicycles. The area has additional space, and there is adequate secure storage for additional bikes if needed. There is also an area outside in the parking lot that is secured for vehicle storage. The area has a locked chain-link fence with partial shade overhead protecting the vehicles from the sun. The vehicle storage area holds roughly a dozen cars and was full. Three additional vehicles were stored in the back parking lot, outside the fenced area. The site has a fence but is accessible by all employees. The department should explore options to expand the secure vehicle storage area to adequately store the vehicles taken into the department's possession.

Software and Tracking Systems

In April 2015, the Property and Evidence Unit transitioned went to all-electronic records with the implementation of a stand-alone evidence tracking system, "SAFE" – Shared Archive for Evidence. The system is robust and allows for efficient intake, tracking, and purging of property and evidence. The system utilizes bar code labels and handheld scanners, enabling efficient tracking of property movement inside and outside the warehouse. The unit still maintains a large volume of older paper records for back-up purposes. The electronic system is reliable and easy to use. The only drawback is the lack of direct compatibility with the department's RMS system. The incompatibility is a common issue for property rooms as most police RMS do not have robust property management tools. Stand-alone systems provide many more effective and efficient features to manage property than do off-the-shelf police RMS. The tracking and software system is more than adequate and meet the needs of the department. There are no recommended changes in the tracking systems used.

Property and Evidence Recommendations:

- As soon as practical, add a full-time Property and Evidence Technician. (Recommendation No. 30.)
- Install a first aid kit in the property packaging area. (Recommendation No. 31.)
- Evaluate the feasibility of installing an eyewash station in the property packaging area. (Recommendation No. 32.)
- Begin the planning process to budget for moveable shelving inside the property evidence warehouse in order to provide more storage space. (Recommendation No. 33.)
- Develop a plan to modify the property warehouse to relocate the drug storage area to increase capacity. (Recommendation No. 34.)
- Evaluate options for expanding the secure vehicle storage area in the back parking lot of the police station to provide for the safe storage of all vehicles the department takes into its possession. (Recommendation No. 35.)

COMMUNICATIONS

The El Mirage Police Department contracts for dispatch services with the Tolleson Police Department. The agreement was initiated in 2016 when the City of El Mirage wanted to transition away from a dispatch contract with the Surprise Police Department. The CPSM consulting team reviewed the dispatch agreement during our site visit, observed the dispatch services, and discussed the dispatching contact with each EMPD focus group. One consultant went to Tolleson PD and met with dispatchers, the dispatch supervisor, the Assistant Chief, and the Police Chief to discuss the contract and the services provided to El Mirage.

Intergovernmental Agreement for Dispatch Services

In 2016, the City of El Mirage and the City of Tolleson entered into an agreement for the Tolleson Police Department to provide police dispatch services to the El Mirage Police Department. The services include answering all 911 calls, transferring fire calls, and dispatching police officers to calls.

The provisions in the contract for data, public records, and equipment are all sufficient. However, there is only one general provision for dispatch services and it has no specific definitions or deliverables. This lack of detail was identified as a potential area for improvement and is discussed later in this section of the report.

Staffing and Costs

The current staffing model for the Tolleson Dispatch Center is two dispatchers per shift. One dispatcher is dedicated to handling the 911 calls and dispatching for El Mirage. The other dispatcher handles calls and dispatching for Tolleson PD and the Desert Diamond Casino, and a portion of the Tohono O'odham Nation Police Department in nearby Glendale. The two dispatchers will help each other during busy or peak times whenever possible, but primarily their duties are separate.

A concern that was raised by El Mirage personnel is the contract's increase in costs. The pricing structure for the contract was recently updated and will take effect on July 1, 2022. The increase also includes one additional dispatcher position. Tolleson indicated it is adding new dispatcher positions in the next fiscal year to increase peak staffing to three dispatchers per shift. The current contract pays for four dispatchers; the FY 2023 contract will pay for five dispatcher positions. The pricing for the 2022 and 2023 fiscal years is outlined in the following table.

TABLE 5-8: Summary of Annual Costs for El Mirage Dispatch Contract

Description	FY 2022	FY 2023
Dispatcher Positions (4 and 5)	\$412,800	\$557,900
Public Safety System Tech	\$101,380	\$120,600
Supervisory	\$131,492	\$124,300
Overtime	\$21,100	\$21,100
Spillman Maintenance	-	-
Motorola Maintenance	\$7,308	\$7,484
Voice Logger Maintenance	\$1,615	\$1,607
IT Support	\$9,500	\$20,000
Interpretation Services	\$1,200	\$1,200
Internet Services	\$5,800	\$5,800
Management and Administration	\$51,418	\$60,100
Total Annual Cost	\$743,613	\$920,091

There were some general concerns with the dispatch services provided by Tolleson expressed in several of the EMPD meetings. One of the main complaints was that Tolleson has a high turnover rate of dispatchers. Some EMPD officers felt like Tolleson was constantly training new people, which is a frustrating situation to work with repeatedly. Other complaints concerned specific issues that have popped up over the years. In discussing the issues with the Tolleson team, they acknowledged a recent high turnover of employees in the dispatch center. A pay adjustment, staffing, and other changes that are in progress are intended to improve attrition rates.

When discussed with Tolleson personnel, some of the other specific El Mirage concerns were viewed differently. For example, an issue brought up several times by El Mirage officers was that Tolleson dispatchers lose track of officers and don't know their accurate location. The Tolleson dispatchers stated the El Mirage officers change locations without notifying them. The officers go into service with their automatic GPS vehicle locator (AVL) disabled or not working.

Based on the interviews with both agencies, it was the opinion of the consulting team that issues do occur, albeit infrequently, and these should be addressed in a timely manner when they arise. Many of the complaints heard were from months and years in the past. Previously, there were quarterly face-to-face meetings between El Mirage and Tolleson managers to discuss dispatch issues. Those in-person meetings ceased during COVID and have not been restarted.

Based on our many hours of meetings with people of all levels from both organizations, we conclude that the issues between the agencies appear to be relatively minor. There seemed to be an underlying sentiment of dissatisfaction by El Mirage employees that the city had discontinued the dispatching relationship with the Surprise Police Department in favor of Tolleson several years ago. That decision was made at a high-level involving city management from all three cities, but was not well-received by some line-level employees in El Mirage. The general dissatisfaction of switching agencies has lingered and likely influenced a slow start to build a

strong relationship between El Mirage and Tolleson. The relationship was reported to have improved over the past couple of years, and our consulting team is confident the relationship will continue to improve.

Many of the issues discussed during the site visit can be addressed through regular communication and relationship building. Members of both departments' command staff are willing to meet more frequently and work through any issues. CPSM recommends resuming the quarterly meetings between the two agencies as soon as possible. In addition, we recommend a Tolleson dispatch supervisor be included in regular EMPD management meetings to build stronger relationships and increase communication.

For issues that cannot be addressed through improved communications, we recommend El Mirage consider creating an operating agreement or revising the contract to include measurable deliverables specific to dispatching. A review of the current contract revealed a section in which the parties pledge to work together. Still, there are few particular deliverables in the contract regarding working together or specifics on what dispatch services look like or how they are delivered. The majority of the contract provisions pertain to data and equipment. Each agency naturally has slightly different definitions of what providing dispatch service means. CPSM recommends a committee of personnel from both agencies work together to formulate specific deliverables, set out the goals to be achieved in a separate agreement, or devise more particular provisions for the next contract renewal.

APCO Audit

The Tolleson Police Department hired the Association of Public Safety Communications Officials (APCOA) to conduct an assessment of the Tolleson Dispatch Center. El Mirage PD was provided a copy of the APCOA assessment report, which we reviewed as part of our assessment of dispatching services for El Mirage.

The overall findings and recommendations from the APCOA assessment were positive. Many minor procedural or other recommendations were made to improve internal operations. A few specific APCOA findings and recommendations were found to be of note for El Mirage:

- El Mirage personnel do not consistently utilize correct numerical identifiers. APCOA recommends reliance on agreed-upon numerical call signs.
- Emergency calls should be dispatched without delay and supplemental information added to the CAD notes as the information is received.
- Dispatchers should participate in structured ride-alongs to observe field procedures and learn the geography of the jurisdictions.
- Tolleson should add 4.43 full-time positions to the dispatch center (one supervisor, three fulltime, and one part-time dispatcher).

Work Load

Between January 1, 2021, and December 31, 2021, the Communications Center recorded 23,667 events for El Mirage involving a responding patrol unit. When measured daily, the department was dispatched to 64.8 patrol-related events per day, approximately 2 percent of which (1.3 per day) had fewer than 30 seconds spent on the call. See the following table for a breakdown of the call types.

TABLE 5-9: CFS per Day by Category

Category	No. of Calls	Calls per Day
Accident	641	1.8
Alarm	585	1.6
Animal	207	0.6
Assist other agency	687	1.9
Check	1,142	3.1
Citizen assist	1,003	2.7
Civil matter	425	1.2
Crime-person	372	1.0
Crime-property	959	2.6
Custody/warrant	332	0.9
Disturbance	2,685	7.4
Drug	243	0.7
Follow-up	1,045	2.9
Investigation	1,020	2.8
Miscellaneous	1,219	3.3
Suspicious incident	1,938	5.3
Traffic enforcement	4,507	12.3
Total	19,010	52.1

Note: The focus here is on recorded calls rather than recorded events. We removed 515 events with zero time on scene and an additional 4,172 directed patrol activities.

Observations:

- On average, there were 52.1 calls per day, or 2.2 per hour.
- The top four categories (traffic, general noncriminal, disturbance, and suspicious incident) accounted for 70 percent of calls.
 - 27 percent of calls were traffic-related.
 - □ 18 percent of calls were general noncriminal calls.
 - □ 14 percent of calls were disturbances.
 - □ 10 percent of calls were suspicious incidents.
- 7 percent of calls were crimes.

Response Times

Data calculations for response times 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 communications operator, and the call is broadcast and assigned to an officer to handle. The dispatch period is measured from the time of the first keystroke, ending when the communications operator gives that call to an officer. The travel period begins after the dispatch period and ends when the officer arrives at the scene of the call. The response time represents the combination of the dispatch operator and travel periods. This is the

time it takes from the initial call to an officer arriving on the scene. A nationally accepted standard for Priority 1 calls is generally five minutes or less. El Mirage is just over a six-minute response time for Priority 1 calls (see following table).

Frequently, there is little that can be done to reduce the driving time of the officers due to traffic conditions, the distance the officer is from the call, or what the officer is doing at the time the call is dispatched. The other area of the response time is from when the call is received and when the call is sent to an officer. The dispatchers in Tolleson who dispatch for El Mirage are also the call takers, which is often the case in smaller agencies.

There are several ways to improve an agency's call response times. One way is to add patrol staffing if necessary. The analysis and discussion of patrol staffing levels were presented in detail earlier in this report. Another way to improve call response times is through focused leadership. Establishing a culture of prioritizing response times to emergency calls for service can occur with consistent focus. This focus would include setting goals, communicating goals, and continuously reinforcing the goals with lower-level managers and supervisors. A culture that values Priority 1 response times also requires consistently measuring and monitoring response times. For El Mirage, which has dispatching services provided by Tolleson PD, there would have to be an increase in communication and shared buy-in between the agencies to improve Priority 1 response times. Finally, under some circumstances, a dispatch center can improve the call processing time by quickly sending units to a priority call, then adding to the call notes additional information as it is being obtained. This was a recommendation for the Tolleson Dispatch Center in the APCOA audit.

CPSM recommends El Mirage work with Tolleson to implement the ACOA recommendation of sending officers to emergency calls as soon as possible, then updating additional information about the call as this information is obtained. We also recommend EMPD work on setting a goal or department value to prioritize responses to emergency calls for service.

TABLE 5-10: Average and 90th Percentile Response Times by Priority

Priority	Dispatch	Travel	Response	Calls	90th Percentile
1	2.2	3.8	6.1	631	9.6
2	4.2	5.1	9.3	2,262	14.5
3	13.0	8.3	21.3	2,770	47.0
4	17.9	9.5	27.4	4,997	59.7
7	22.3	18.4	40.7	71	78.8
Total	12.9	8.0	20.8	10,731	49.0
Injury accident	2.6	3.8	6.4	73	11.3

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

Options for Emergency Dispatch Services for El Mirage

CPSM was asked as part of this assessment to evaluate options to improve the emergency call answering and dispatching services for the City of El Mirage, including the costs of creating an EMPD Dispatch Center. As part of this assessment, our team thoroughly examined the current contract between El Mirage and Tolleson for dispatch services. The team also reviewed the recent APCO assessment of the Tolleson Dispatch Center, spoke to dozens of parties from both agencies, and reviewed the financial component of the current contract compared to estimated costs for El Mirage to set up its own dispatch center. Equipment and software cost estimates were derived from other agencies' recent expenditures for similar equipment.

The CPSM consulting team believes El Mirage has four distinct options for emergency dispatching services.

Option 1: Regional Dispatch Center

The first option to explore further would be reaching out to other agencies to gauge interest in creating a joint regional dispatch center.

Joining forces with several agencies to create a Joint Powers Agreement (JPA) for managing a dispatch center would likely be the most financially beneficial of these options. Of course, potential cost savings would depend upon the number and size of the agencies participating. During our site visit, we learned there are several West Valley agencies that manage their own dispatch centers and which could benefit from sharing resources and creating a regional center. This concept is not new for the West Valley, but the idea has lacked political support in the past. However, it is worth revisiting given the difficulty many agencies are undoubtedly experiencing with recruitment and retention of dispatchers. CPSM recommends EMPD have conversations with other agencies about the longer-term possibilities of creating a regional dispatch center for the West Valley.

Option 2: Continue Contracting with Tolleson

The second option for EMPD is to continue its contract with the Tolleson Police Department for dispatching services.

Making minor improvements to the agreement, combined with an effort to improve relationships, makes remaining with Tolleson for dispatch services a viable option. The issues identified with the current EMPD and Tolleson PD agreement are minor and can be rectified. Despite the recent increase in costs imposed by Tolleson, the costs for El Mirage PD to create a stand-alone center would substantially exceed the costs of the current Tolleson contract. Refer to Tables 5-8 and 5-11 to compare current costs with estimates for EMPD to create a stand-alone center.

Option 3: Solicit a Proposal from a Different (from Tolleson) West Valley Agency to Contract for Dispatch Services.

If El Mirage is interested in moving away from its contract with Tolleson PD for dispatching services, the third option is for the city to seek proposals from nearby West Valley agencies.

The Surprise, Buckeye, Glendale, and Peoria police departments all have dispatch centers and may be willing to contract with El Mirage. Changing dispatch contract agencies would entail a substantial effort by EMPD staff, and there would be a significant learning curve for all employees. CPSM recommends this option only if the costs for Tolleson become non-competitive or if the relationship worsens and cannot be improved.

Option 4: Create a Stand-Alone Dispatch Center

Lastly, El Mirage has the option of creating and operating a stand-alone dispatch center.

There are benefits to creating an in-house center. The connection between officers and dispatchers tends to be stronger when both groups are part of the same agency operating out of the same building. The ability to control training and customize policy and procedures can also significantly benefit an agency. Cross-training officers or other employees to fill in for dispatchers is also an option for an in-house center.

El Mirage would have substantial hurdles to overcome before creating a stand-alone center. One of the first hurdles would involve adding appropriate space for a dispatch center. The El Mirage Police Station does not have extra space for a dispatch center. Without consulting an architect, a cost estimate of additional space of approximately 2,500 square feet was not available. If the City of El Mirage decides to pursue a stand-alone dispatch center option, CPSM would recommend the department work with an architect who has police facility experience to design the appropriate space and provide an accurate cost estimate for construction.

The department would need to add full-time dispatch center staff. Our team reviewed the staffing of the Tolleson Police Department and industry standards provided by APCOA. There are many possible deployment schedules for a dispatch center. Deciding on the schedule would help determine the staffing levels necessary to create a stand-alone center. The staffing for a stand-alone center would require at least two employees per shift, based on the call volume of El Mirage. The one person Tolleson assigns to El Mirage is insufficient, especially when the second dispatcher in the room is also busy. (This is the reason for the additional dispatcher added in the FY2023 contract).

CPSM would recommend staffing an El Mirage Dispatch Center with 13 total employees: 8 dispatchers, 3 dispatch supervisors, and 1 dispatch manager, with dispatchers and supervisors working a 12-hour rotating shift schedule. The supervisors would be required to work scheduled shifts at a console in the center. The manager could fill in as needed but would generally perform managerial duties. CPSM would recommend minimum staffing of two dispatchers in the center for each shift. A potential deployment schedule could follow the four 12-hour shift rotation similar to the one shown in Table 4-9 in the patrol staffing discussion.

In addition to the personnel costs, a stand-alone center would require the purchase of dispatch consoles, computer hardware, and software. 911 technology is currently undergoing a generational upgrade. The newer systems are called Next Generation 911 systems; these systems can be operated on a cloud-based system. There are many benefits to the newer generation of dispatching technology, and therefore for this option, our team recommends a Next Generation 911 system.

The estimated costs for El Mirage creating a stand-alone dispatch center are shown in the following table. The costs are based on the experience of other agencies expenditures; El Mirage personnel cost estimates are based on the West Valley market salary for dispatchers. The estimated costs do not include any spending for the additional space that would be needed. Those costs would be an additional capital expense.

TABLE 5-11: Estimate of Dispatch Center Costs

Description	Per Unit Costs	Annual Costs for Stand-Alone Dispatch Center	One-Time Costs for Stand-Alone Dispatch Center
Dispatcher Personnel Costs (8 positions)	\$110,000 per position	\$880,000	
3 Supervisor	\$130,000	\$390,000	
1 Manager	\$150,000	\$150,000	
Next-Generation 911 Software and Hardware	\$650,000	\$50,000	\$650,000
Dispatch Consoles and Equipment (4 Consoles)	\$16,000 Per Console		\$64,000
Total Estimated Costs		\$1,470,000	\$714,000

Based on the estimated costs to start a new stand-alone dispatch center, EMPD should consider this option cautiously. CPSM would recommend that EMPD consider the creation of a standalone center under the following circumstances:

- If the City of El Mirage decided to build a stand-alone center to accommodate future growth and/or provide a higher level of emergency dispatch services to its residents
- If contracting costs continue to escalate and get closer to the costs of a stand-alone center.
- If the service from Tolleson Dispatch cannot be improved or becomes unacceptable

Communications Recommendations:

- CPSM recommends EMPD command staff resume face-to-face meetings with the dispatch team and command staff from Tolleson PD. (Recommendation No. 36.)
- Ensure a Tolleson PD communications supervisor regularly attends El Mirage command staff meetings to help improve the relationship and overall communication between the two agencies. (Recommendation No. 37.)
- Based on the APCOA assessment of Tolleson dispatch CPSM recommends the following actions (Recommendation No. 38.):
 - □ (a) EMPD staff should work with Tolleson to improve the use of proper codes, plain language, and call signs by EMPD officers.
 - (b) EMPD should ensure Tolleson dispatch works to improve the call dispatching time for Priority 1 emergency calls.
 - (c) EMPD should explore ways to partner with Tolleson PD to improve recruitment and retention of Tolleson dispatchers (to dispatch for El Mirage). For example, the two agencies could partner on social media advertisements, awareness campaigns, and the benefits of being a dispatcher.
- Of the options presented for dispatching services, CPSM recommends Option 2, and that is for the EMPD to continue contracting with the Tolleson PD for dispatch services while working to improve the working relationship between the agencies. (Recommendation No. 39.)

TRAINING

The department does not have a stand-alone training unit. Rather, a lieutenant assigned to patrol performs the duties and responsibilities of "training officer." This lieutenant is primarily charged with scheduling and monitoring ongoing training within the department. The Records supervisor is responsible for maintaining training records for all members of the department. Training records for department employees were reviewed and found to be properly maintained.

CPSM believes that a uniformed supervisor should be developing, scheduling, coordinating, and delivering training within the department. We therefore recommend that the department designate one sergeant to serve as Training sergeant. [Note: This is a new position added to the current organizational chart.] This would relieve the lieutenant of his training duties and free him up for more enforcement-related duties. In addition to coordinating on-going in-service and field training, the newly-designated Training sergeant would be primarily responsible for developing and coordinating the delivery of in-service lessons.

The department does not have a formal multiyear training plan with articulated training goals and assessment measures. Rather, it utilizes an annual training calendar or schedule. The consultants reviewed the 2021 and 2022 training calendars and found them to include training modules mostly related to mandatory recertifications in such areas as firearms qualification, CPR, etc. The calendar contained several other useful and timely topics that were delivered online or off-site.

The department should develop a multiyear training plan. This training plan should identify specific training goals and objectives for all units, and all sworn and nonsworn members of the department, and should be incorporated into the department's newly created overall multiyear strategic plan. The department's Training sergeant would be chiefly responsible for developing, reviewing, and revising the training plan as necessary.

The department has a training committee comprised of the training lieutenant, two sergeants, five officers (including the K-9 officer), and at least one detective. The training committee is charged with proposing and developing new training.

The training committee should meet regularly to consider the training needs of the department and set the agenda and specific training goals for the entire department. The training committee should also solicit ideas, identify operational problems and training opportunities, formulate specific training plans, and evaluate and periodically report on the success of training received by members of the department. The newly-designated training sergeant should serve as chair of the EMPD training committee.

The training committee should utilize the resources offered by the International Association of Directors of Law Enforcement Standards and Training (IADLEST). IADLEST membership includes access to an information portal that provides lesson plans, webinars, innovative learning strategies and activities, assessment tools and rubrics, etc.

Recruit Training

The EMPD hires new police officers who have either: 1) graduated from a regional police academy; or 2) already have certification and prior law enforcement experience (that is, a "lateral" hire). The majority of recent EMPD hires have been laterals.



There are 15 law enforcement training academies in the state and a number of these are in the region, including the Maricopa County Sherriff's Office (MCSO) academy, the Glendale Community College law enforcement training academy, and the Chandler-Gilbert Community College Police academy. We note that the Glendale C.C. academy has recently changed its operations. A notice on its website states, "GCC will not be offering a law enforcement training academy at this time due to active recruiting by agencies in the valley and a lack of qualified applicants. We have shifted to an on-demand model at agency request" (See: https://www.gccaz.edu/public-safety-sciences/leo/leta). CPSM views this as a rather troubling sign that police recruitment in the region is now reaching a critical phase.

The content and length of academy training is determined by AZPOST. The Basic Training Curriculum consists of "88 lesson plans, which include classroom and proficiency skills training, along with reality-based training scenarios. The curriculum spans 663 hours of basic training" (See: https://post.az.gov/training/basic).

Prior to commencing field training, new hires spend one week of on-site orientation and onboarding. During this period, probationary officers review EMPD policies and procedures, perform firearms qualifications, etc. Newly hired police officers undergo a probation period of 12 months from the date of hire.

Field Training

The EMPD has a uniform policy and procedure for the administration and assessment of training of all probationary officers.

Interestingly, the EMPD Field Training Program is a hybrid training model that utilizes practices from both the Reno and Scottsdale field training programs. The program does not use daily observation reports (DORs) of officers in training (OITs). Rather, it utilizes a process of core competencies journaling and contact interaction and communication between OITs and field training officers (FTOs). The journaling process "focuses both the OIT and trainer and forces them to compare notes." By contrast, the DOR process is one-directional and essentially serves as a series of performance critiques. OITs are provided an opportunity to reflect upon their personal knowledge and skills to describe what was gained during the training process.

Probationary police officers who are not lateral hires must undergo the full field training program, which consists of three primary training phases and one observation phase. A separate training week is scheduled between phases two and three during which OITs perform traffic and DUI enforcement. Lateral hires from within the state undergo an abbreviated field training program of no less than six weeks. This entails a three-week training period and a three-week observation period. The field training periods of both new recruits and laterals may be extended, as necessary until the probationary officer has successfully completed all of the included training areas. The EMPD has done this in the past.

At the time of the CPSM site visit, the EMPD had a total of ten active certified field training officers (FTOs) and a field training sergeant/coordinator (who is assigned to a patrol squad). There are also a number of inactive certified FTOs within the department. An FTO certification course is offered by the MCSO and the National Association of Field Training Organizations.

FTOs do not meet formally as a group, primarily due to scheduling conflicts. The field training sergeant regularly performs a review of the core competency journals of OITs. Patrol supervisors do this as well for probationary officers in their squads. The sergeant does not regularly meet with OlTs. Rather, he communicates with and follows their progress through the journals and direct communication with FTOs. OITs rotate through to new FTOs after completing each training phase and are evaluated by a minimum of three FTOs. The phase 1 FTO is typically assigned as the final observation phase FTO. OITs follow the shift schedules of their FTOs and work all patrol shifts during training.

The department's field training materials and related policies and practices concerning field training were reviewed and found to generally meet or exceed the quality of those of similarly sized American police agencies.

There is a far less formal field training program for sergeants. CPSM was advised by one supervisor that "the program could be more structured." The department does, however, have a sergeant's training manual.

There is also a field training protocol and program for police assistants. Police Assistants "work under the direction of a field training officer until they have completed EMPD's Police Assistant Training program (PATP) and obtained 'solo capable' status." (5.13, III C, 1)

In-Service Training

Pursuant to Arizona Administrative Code title 13, section 4, in order to maintain certification, police officers must complete a minimum of eight hours of continuing (i.e., in-service) training each year, as well as an additional eight hours of "proficiency" training every three years. Proficiency training includes such topics as defensive tactics, taser use, de-escalation training, etc. The EMPD reports that its police officers, on average, receive a total of approximately 40 hours of in-service training each year. Detectives receive the same training as police officers. Detectives are scheduled for a criminal investigations training course upon appointment.

AZPOST offers a variety of in-service classes, as does the Rocky Mountain Information Network (RMIN) and a number of commercial vendors, such as the Legal and Liability Risk Management Institute (LLRMI). Classes are offered online and in-person. Officers who wish to attend a particular class may submit a training request. CPSM reviewed the department's policy for reviewing training requests and found it to be appropriate. The EMPD recently requested an increase to its training budget. EMPD officers rarely attend training out of state. Out-of-town travel is typically a major driver of training costs.

The EMPD uses PoliceOne, a web based training platform, to track all online training, to advertise Arizona POST training offerings, and to disseminate policy updates. In addition to his other duties, the senior police program specialist posts police training lessons on PoliceOne.

The majority of in-service training occurs on-site, with the exception of emergency vehicle operation and active shooter training. Classroom and practical training facilities were inspected and found to be adequate for their intended purposes.

A number of in-service lesson plans were reviewed, including the lessons on basic active shooter response, de-escalation tactics, sudden custody death syndrome, and less-than-lethal pepper ball operator certification. Lessons were found to be clear, comprehensive, and properly formatted. Source materials were referenced. Learning and performance objectives for each lesson were clearly stated. Several of these lessons called for student officers to physically demonstrate requisite skills. The department utilizes appropriate retention practices for lesson plans. Lessons are separately numbered and filed. Printouts of PowerPoint slide decks were appended to lessons, when utilized. The Records supervisor is charged with maintaining all internal lesson plans.

Recruit and in-service lesson plans should be paginated as follows: "page 1 of 5, page 2 of 5, etc." Some of the lesson plans we reviewed were not paginated at all. Proper pagination is



required as lesson plans often end up as legal exhibits in litigation related to police training content and practices.

The department does not have its own SWAT or SRT unit. Rather, it utilizes the services of units from adjoining departments (such as the DPS and Surprise PD). The city is not charged for unit callouts within El Mirage. This alleviates the need for a great deal of ongoing specialized training for team members. Search training is extremely costly. The department's utilization of such services by other agencies represents a considerable savings to the department and the city, while still maintaining an appropriate degree of protection for the community.

Several members of the EMPD possess general and specialized training certifications and provide on-site training on a variety of topics, such as defensive tactics, driver training, firearms, etc. The department also has its own armorers. The majority of in-service training is delivered onsite (at headquarters or a local facility/location) rather than online.

CPSM reviewed the department's training calendars for 2021 and 2022 and found that they include timely and important training topics such as interactions with the homeless, legal updates, etc. Edwards and Amato and attorneys from the local prosecutor's office have been used to provide these legal updates. PoliceOne is used to distribute policy updates and to conduct related online trainings. A room in the headquarters building is used for traditional classroom instruction. The local YMCA is used for physical, defensive tactics training. Uniformed members of the EMPD also received ten hours of crowd control training (both classroom and field instruction) within the past two years.

The department utilizes the firearms range operated by the Surprise Police Department as well as a commercial range (Shooters' World). Driver training is conducted at Luke A.F.B. The EMPD utilizes its own instructors and vehicles for this training.

In light of recent national events, de-escalation and judgmental use of force training for police officers has become critically important for all communities. The technology regarding immersive firearms simulator training is rapidly evolving. The current firearms simulation equipment utilized by the department is adequate, but the department should be continually open to utilizing new and emerging technologies. We believe that all police departments must avail themselves of the most current firearms training technologies and methods available. During our site visit we discussed such state-of-the-art systems that are now utilized by other departments in the state. We recommend that the department seek opportunities to provide fully immersive judgmental firearms simulator training to its officers by: 1) obtaining and utilizing a state-of-the-art simulated firearms training system of its own (and perhaps sharing the costs with one or more law enforcement agencies in the region); or 2) seeking opportunities to utilize such equipment owned and operated by other law enforcement agencies in the region (such as the Scottsdale PD).

Management Training/Executive Development

There is a separate Sergeant's Training Manual. This manual was inspected and found to be comprehensive and appropriate for its intended use.

The department should encourage and actively support members of the department to apply to the FBI National Academy and other executive management training programs.

Training Recommendations:

- Create a new position of Training sergeant to be responsible for developing, scheduling, coordinating, and delivering training within the department. The newly-designated Training sergeant should work to enhance the current program of field training for newly-appointed sergeants. This individual could also take primary responsibility for the review and revision of the EMPD's SOPs. (Recommendation No. 40.)
- The department should develop a multiyear training plan. This training plan should identify specific training goals and objectives for all units, and all sworn and nonsworn members of the department, and should be incorporated into the department's newly created overall multiyear strategic plan. The department's Training sergeant would be chiefly responsible for developing, reviewing, and revising the training plan as necessary. (Recommendation No. 41.)
- Develop tactical training in de-escalation techniques and judgmental use of force for police officers. (Recommendation No. 42.)
- The department should encourage and actively support members of the department to apply to the FBI National Academy and other executive management training programs. (Recommendation No. 43.)

FACILITIES

The police headquarters is a 20,000 square foot facility that was built in 2014. The facility contains administrative offices, areas for evidence processing and storage, prisoner processing for both adults and juveniles, male and female locker rooms, and a large community room off the public entrance. The facility was also designed to fit into the aesthetic character of the new civic development in the immediate vicinity.

It is a well-designed and attractive addition to the community, but already surpassing its useful capacity.

The parking areas around the building are secured by a fence and there is full video camera coverage of the entire building and at each gate. Large metal containers in the yard are used for bulk storage. A separate storage box is used for storage of flammable materials. Police vehicles are parked under a covered port. Impounded vehicles are also placed in the yard. There is a garage bay with a hydraulic lift that can be used for evidence vehicles. A large generator system is located adjacent to the headquarters building.

A sally port was found to be fully secured, covered by video cameras, and appropriate for its intended use. Prisoners brought into the building are scanned with a metal detector wand and placed temporarily in a transfer cell. Firearms lock boxes were inspected and found to be secure and appropriate for their intended use.

There are four individual unisex holding cells at the headquarters building. They were inspected and found to be clean and secure. Cells are equipped with video cameras. There is also one large cell designed to hold three detainees. This cell is equipped with video camera and microphone (but no recording system). CPSM notes that the current location of the toilet flush in this cell is awkwardly placed and typically leads to unsanitary conditions in the cell. All cells are used exclusively for processing, rather than extended stays. The arrest processing area also contains LIveScan equipment, Intoxilyzer equipment, PCs for officer paperwork, and a dark room for processing DUI arrests. There are panic alarm buttons strategically placed throughout this area.

There is a separate juvenile holding area; one room is secured; the other is not.

The crime scene processing area appeared to be unused (and presumably available for other purposes) at the time of our site visit.

The outer door of the property room was properly secured. There are a total of 22 secure passthrough lockers outside the property room. One locker is refrigerated.

There are two interview rooms on the main floor. These are used by detectives and patrol officers. Video and voice recordings are automatically linked to case number via the AXON system. There is also a "soft" interview room.

The "monitoring room" (#167) also appeared to be available office space. Other available office space was noted in the administrative section of the building.

All patrol sergeants have their own work spaces (i.e., cubicles).

The patrol briefing room was found to be large enough for daily use. Members of the department suggested that this space is insufficient when outside law enforcement attends briefings. CPSM believes that the current space is sufficient.

During our inspection, all doors to secure locations were found to workable and properly secured by electronic keypad. The department's server room was secured and equipped with an appropriate fire suppression system.

The exercise room was found to be clean and well-equipped. The locker room was similarly clean, well-maintained, and well-equipped. CPSM was advised that the department will be modifying this locker room to accommodate female lockers. We believe that the facility is large enough to accommodate this change.

The lobby to the headquarters building is open to the public from 7:00 a.m. until 5:30 p.m., Monday through Thursday. After business hours, the main building is secured but the vestibule outside the main doors is accessible so that members of the public can enter and communicate directly with dispatch. Emergency and non-emergency calls for service can be placed to Tolleson dispatch via landlines installed in the vestibule. A patrol unit will be dispatched, as necessary.

The public service window in the main lobby was inspected and found to be secured with bulletresistant glass. Video cameras are positioned throughout the building. We note that live feeds from these cameras are not routinely monitored.

A large narcotics drop-off box is located in the lobby of the headquarters building. This receptacle was inspected and found to be properly secured and appropriate for its intended use. Proper protocols and procedures are followed for the collection, transportation, and destruction of items received in this manner.

CPSM consultants noted that the detectives have run out of space in their offices. Efforts are underway to modify work spaces so as to maximize them. CPSM believes that there is ample available space within the existing building to accommodate them. This would, however, require a thoughtful review of available office space and likely relocation of some personnel. In conversations with command staff, the consultants suggested downsizing the workspace for patrol sergeants. This might not be necessary if a careful internal space utilization review is conducted.

Determining the necessary amount of space for police operations is a difficult task. The main bulk of police work is conducted off-site in the community, therefore, there is no reliable measure for space per officer. Nonetheless, it is possible to examine current and proposed staffing levels for personnel working inside the police facility. This can be accomplished by considering the current space utilization and future needs to estimate space required for efficiency, effectiveness, and comfort.

Currently, the EMPD facility is already overcapacity. The police officer locker rooms do not have enough space to accommodate all those that need them. The department is considering unisex or gender-neutral locker areas to be shared by male and female officers.

CPSM notes that the current area for detective operations is overcrowded and past its functional capacity. CPSM is recommending additional personnel in this area, including a detective lieutenant, one full-time detective, part-time civilian investigators, and a crime analyst. These personnel are in addition to the newly constituted Neighborhood Enforcement Team (NET) consisting of one sergeant and three police officers. These individuals will require office space in addition to the overcrowded space that is already being used.

This report notes that the evidence, property, and vehicle storage areas are also over-capacity. CPSM also recommends the addition of a dedicated training sergeant and IT personnel. Again, these positions, if staffed, will require dedicated office space to function properly.

The EMPD is evaluating the current dispatch contract with the Tolleson Police Department, which might result in assuming dispatch services and emergency communications in-house. This decision alone will require substantial space needs which CPSM estimates to be approximately 5,000 square feet.

In order to address the physical space needs in the police facility, CPSM recommends a multiphase approach. Phase one should be the re-examination of current space utilization. For example, CPSM notes vacant space in areas of the building. There is also dedicated office space for patrol supervisors, which could be consolidated to be more efficient and promote an "on patrol" presence instead of an office presence. Therefore, the EMPD should create a physical-space task force to evaluate current space utilization. This effort could alleviate some of the overcrowding in advance of more permanent construction of space that will take time to build.

Phase two should be planning for the construction of additional space for the headquarters facility by approximately 25% or 5,000 square feet. This expansion would be sufficient to accommodate the current and recommended staffing needs. If the EMPD decides to take on dispatching services, an additional 5,000 square feet will be required.

The cost of adding 5,000 or 10,000 square feet of space to the existing facility are unknown. Supply-chain issues, and COVID-related issues that are impacting the construction industry make it almost impossible to predict the costs of construction. A conservative estimate would assume approximately \$350 per square foot for construction costs.⁷ Depending on the exact size of the addition to the facility, and in context with CPSMs estimated needs, would put the approximate cost between \$1,750,000 and \$3,500,000 to meet future capital needs.

⁷ https://ccorpinsights.com/costs-per-square-foot/



FLEET

The consultants performed a detailed inspection of the department's fleet of vehicles, as well as its policies and procedures for performing routine vehicle maintenance. Failure to perform routine maintenance or to maintain comprehensive maintenance records such as oil change records and change schedules can invalidate manufacturer warrantees and subject the city and the department to unnecessary expense.

At the time of our site visit, the department had a total of 35 motor vehicles assigned to patrol; 12 vehicles assigned to the investigations bureau; six vehicles assigned to administration (command staff); and an additional four police vehicles that were being utilized pursuant to specific grants. The fleet consists of sedans, pickups, vans, etc. that are primarily GM products. The department also has two BMW motorcycles in its fleet that are used for traffic enforcement and ceremonial details. The department does not have a vehicle take-home policy except for investigations, canine, and command staff. All vehicles were inspected and found to be appropriate for their intended purpose. Vehicles that are purchased with grant funding typically have limitations in terms of their usage. For example, a new patrol vehicle might be limited for a one-year period to be used specifically for DUI enforcement. Once this time period has elapsed, the vehicle can then be integrated into the permanent fleet and used as needed.

The department's senior police program specialist is chiefly responsible for managing and maintaining the department's fleet of vehicles.

The consultants reviewed the policies and procedures for vehicle maintenance and found that they meet or exceed the quality of those of similarly-sized police departments. The department utilizes a fleet management software program called Vehicle Fleet Manager 4.0 to monitor all of its vehicles. This is a relatively inexpensive (i.e., a one-time cost for software and license) and effective program that closely monitors maintenance. Fuel consumption is closely monitored. Vehicles are fueled at the Dysart bus barn fueling station. Fuel is purchased in bulk at a discounted rate. The Dysart school gas data system is used to provide consumption data to the department. Each motor vehicle has its own gas card and every employee has a separate pin number so the department can closely monitor individual fuel usage.

Vehicles receive oil changes at 3,500 mile intervals. Mechanics rotate tires and check brakes at every scheduled oil change. Tires are changed at 40,000 mile intervals. Vehicles are equipped with Kevlar-lined tires. Service is performed either at a dealership (if vehicle is still under warranty) or at a local service station. Pricing for these services is competitive and appropriate. Major repairs are performed at the dealership if a vehicle is under warranty or at the local service station if not under warranty. Minor repairs and vehicle maintenance, such as the replacement of windshield wipers, spotlights, etc., are managed by the senior police program specialist.

The department obtains relatively high mileage from all of its vehicles. CPSM recognizes that well-maintained police vehicles can perform effectively well beyond 100,000 miles. The department has been particularly successful at repurposing vehicles (for example moving a high-mileage marked patrol vehicle to be used by police assistants).

The department follows a clear vehicle replacement schedule and decommissions vehicles once they have exceeded their useful life. A private company (AEP) is used as an 'upfitter' for police vehicle equipment. This company performs initial installation of emergency lights, canine package (temperature sensor and fans), etc. AEP works closely with the vehicle dealership and the paint company to coordinate graphics, detailing, etc. We note that police radio installation typically has to be performed on-site by the vendor (Motorola). For this reason, it is not uncommon for several new police vehicles to sit unused in the police parking yard awaiting

equipment installation by the vendor. Failure to use the vendor for such installation would void any applicable warranty.

CPSM concludes that the department properly maintains and wisely utilizes its vehicles. The size of the vehicle fleet is appropriate relative to the EMPD's current needs.

RECORDS

The Records Unit is staffed by one police records supervisor, one management support assistant, and three senior police records technicians. These employees are all non-sworn. The management support assistant is charged with performing the duties of receptionist. The supervisor also oversees a part-time vehicle impound technician.

Records technicians perform a variety of data-entry and administrative tasks such as performing ACIC validations.

Every month the department is provided with a file from the Arizona Department of Public Safety (DPS) which lists current alarms for stolen vehicles, missing persons, stolen guns, stolen license plates, and wanted persons. Personnel in the Records unit are required to perform validation, that is, they are required to check to see that these alerts remain valid (for example, if a wanted person has been apprehended, the alarm must be canceled). In order to perform validations, a records technician must review the initial report, as well as additional reports within the RMS, to determine an item's status. This work may also require telephone calls, for example when a records technician needs to speak with the complainant to determine whether a stolen item has been recovered or not. The performance of such validations requires a considerable expenditure of time.

The department utilizes the integrated Motorola Spillman Flex records management and computer-aided dispatch (CAD) systems (see https://www.motorolasolutions.com/en_us/products/command-center-software/records-andevidence-management.html).

The department has used these systems since 2007. End users (both sworn and non-sworn, in various assignments) generally report that these systems are functional and fairly user-friendly. There has been no history of breakdowns or technical problems. The systems are updated and generally well-maintained.

Motorola provides annual maintenance and technical support for the RMS and CAD systems. The EMPD does not perform its own dispatch. Since dispatch is performed by the Tolleson PD the servers for the RMS and CAD systems are located at Tolleson. The Tolleson Communications Center provides a certain level of technical support to the EMPD. Tolleson works directly with Motorola for system upgrades, development of patches, etc.

The RMS contains a number of modules that are not being utilized by the department, such as:

- EMS records menu.
- Pawned property menu.
- Inventory management menu.
- Alarm tracking menu.



The modules that are actively utilized include:

- Dispatch menu.
- Law enforcement records menu.
- Sentryx jail.
- Sentryx imaging.
- Sentryx file capture.
- Traffic information menu.
- Vehicle impound menu.
- Personnel management menu.
- Evidence management menu.
- State link menu.
- Message center menu.
- Sentryx IBR.

Police reports are prepared in the field by patrol officers via the mobile data terminals (MDTs) installed in patrol vehicles.

Once prepared, a report is electronically forwarded to the patrol supervisor for review. The patrol supervisor will then either approve and accept the report or return it to the officer for correction and/or completion. If an officer fails to complete and submit a required report, the system will automatically inform the officer that such a report is required.

Once a patrol supervisor approves a field report, it is placed in a queue for review and completion by a member of the Records Unit. Records will again review the report to ensure that it is complete and properly coded. Any IBR coding errors will be noted and corrected as necessary. If nothing further is required of the officer or the patrol supervisor, the record is then "completed" and is then ready to be submitted to the Arizona Department of Public safety via the IVR reporting system. Narrative portions of the reports are "locked down" so that no further alterations can be made to the report. Police field reports are visible and accessible by authorized persons (e.g., detective investigators) from the time they are initially prepared by the officer in the field. Reports related to sensitive investigations such as an officer involved shooting or an arrest of a member of the service can be partitioned so that access is further limited.

During the focus group discussions that were led by our consultants, EMPD officers voiced a general dislike of the IBR reporting process.

Patrol officers generally indicated that they are dissatisfied with the amount of time that it currently takes to complete all required fields in a police report. Indeed, the NIBRS reporting system is an exacting process whereby all required fields must be completed and proper codes must be entered. The Spillman RMS system apparently gives officers an error message whenever forms are not filled out properly. For example, during a domestic violence call, there might be multiple suspects and multiple victims. In such situations, one individual can actually be both a suspect and a victim. It is therefore difficult for officers to always enter all required fields properly. Due to their frustration, patrol officers suggested that such coding should in fact be completed by records technicians.

CPSM has observed similar situations and internal dynamics at other police departments that we have studied. We generally believe that patrol officers should be the individuals primarily responsible for completing all required fields properly.

CPSM concludes that the records unit is appropriately staffed.

Records Recommendation:

In-service training should include a regularly scheduled training session regarding proper field reporting and NIBRS coding. The Records supervisor should deliver this training. (Recommendation No. 44.)

INFORMATION TECHNOLOGY

The department does not employ its own IT supervisor or technician. Rather, it relies upon the services provided by the city's IT department, and the City IT department has developed a technology plan for the police department. There is no one point person or liaison within the city's IT department that services the EMPD. Rather, work requests are submitted to the city's IT help desk and responded to by IT staff technicians. IT technicians perform necessary maintenance on mobile data terminals installed in police vehicles.

Servers for the RMS and CAD systems are maintained in Tolleson. The department has servers onsite for its cloud-based body worn camera (BWC) data system, telephone system, fixed camera systems (located in the headquarters and jail), etc. The department's server room was inspected and found to be secure, adequately protected by a fire suppression system, and appropriate for its intended use.

The department began utilizing BWCs in 2015. Initially, the department purchased and utilized Flex Axon units. In January 2021, the department purchased and equipped its officers with Axon Body 3 BWCs. Members of the department generally report that these units are highly functional and appropriate for their intended purpose. These units have enhanced operational features, such as automatic activation when an officer draws a taser or firearm, or the ability to synchronize and tag video data with other cameras nearby. Video footage can be easily linked to police reports and properly categorized.

Video data from the BWC is downloaded automatically via unit docking stations. The department does not have a wireless system for downloading such data directly from police vehicles.

BWC video data storage has proven to be a considerable expense for American police departments. The EMPD utilizes a commercial vendor, evidence.com, which provides cloudbased data storage. While CPSM does not expressly endorse any specific product, we believe this to be an effective and relatively cost-efficient means of managing video data. When freedom of information requests are received by the department, the Records supervisor is charged with providing requested documents. Redaction of police BWC footage is performed as necessary by uniformed supervisors and/or the police property specialist.

The policy for body-worn cameras (SOP 8.09, dated 11-18-20) was reviewed and found to be clear, thorough, and consistent with those of similar sized agencies. It contains clear guidance for camera operation (i.e., policy on when the officer must activate the unit and/or unit automatically activates), storage of electronic data, auditing, investigatory and supervisory review of videos, and the use of BWC video for training purposes. SOP 8.09A provides a

comprehensive schedule for BWC file retention. These policies and procedures are consistent with best practices in American policing.

BWCs are distributed appropriately to personnel throughout the operations division.

There are no video cameras installed in police vehicles.

CPSM was advised that "there is no direct connection between the Spillman system and the GIS mapping system." This is apparently the result of "not having the right server." As a result, the department is limited in its ability to perform certain crime analysis and performance assessment functions. For example, it is now difficult to prepare "heat maps" that would indicate relative levels of calls for service throughout the city. A great deal of effort would need to be expended to "fix the addresses" in order to create such a map. As a result, the department does not routinely engage in analytical GIS mapping.

The senior police program specialist is responsible for purchasing handheld and car radios.

The department does not presently have a formal technology task force or committee to evaluate and test new technology and equipment, the senior police program specialist does, however, field test equipment such as MDT mounts in police vehicles by soliciting input from end users, such as patrol officers, detectives, and supervisors, as well as city IT personnel (as installation necessarily involves connectivity issues). CPSM was informed that the process is informal and not documented. Final approval from the Deputy Director and Chief are required prior to purchase.

Information Technology Recommendations:

- Technology needs for American police departments are evolving and expanding rapidly. The city should consider assigning a dedicated IT professional to the EMPD. This individual would have a comprehensive understanding of the department's various systems and needs and would be charged with identifying, installing, and maintaining hardware and software for such technologies as body-worn cameras, drones, license plate readers (LPRs), etc. (Recommendation No. 45.)
- In order to justify a full- or even part-time in-house IT position, this individual could also be charged with making approved revisions and distributing SOPs and related on-line training materials throughout the department. (Recommendation No. 46.)
- The department should establish an internal technology taskforce. This body should be comprised of supervisors, line officers, an IT professional assigned to the department, and civilian members of the department. It should meet regularly, and should: 1) identify the department's current technology needs; 2) field test, evaluate and select new equipment, software and technologies; 3) identify any deficiencies in the department's current communications (CAD), records management (RMS) or other data systems; 4) periodically revise and update the department's website; 5) identify technology training needs, recommend and develop additional training; and 6) make specific recommendations for improvement, where necessary. This task force would report to the Deputy Director. (Recommendation No. 47.)
- The technology task force should develop a formal long-term replacement plan for all of the department's IT equipment and software. (Recommendation No. 48.)

RECRUITMENT AND RETENTION

The department has been quite successful at recruiting and hiring qualified individuals for the position of police officer. The department has a distinct strategy for advertising open positions via a wide array of media platforms. SOP 3.01 describes the procedures for recruitment and selection of personnel. This includes physical agility evaluation, polygraph examination, psychological test, interviews, medical examination, and drug screen (SOP 3.01, 2, B 1). These procedures are appropriate and consistent with best practices in American policing. Minimum qualifications for appointment as a peace officer in Arizona are promulgated by the Arizona Peace Officer Standards and Training (AZPOST) board and the Arizona Administrative Code.

The Deputy Director is chiefly responsible for developing and maintaining the department's recruitment program (3.01, II, A, 2) and takes an extremely active role in carrying out all phases of the department's recruitment plan. CPSM believes that such command level attention to police recruitment is now essential, due to the increasingly competitive and challenging work environment. Many agencies are experiencing a recruitment and retention crisis. Police departments must employ new strategies and procedures to attract and retain qualified employees.

The department currently does not utilize a written examination for police applicants. While such exams are indeed useful, we do not view them as a necessity, provided that other effective assessment mechanisms are in place and properly utilized. The Deputy Director employs a strategy of making "early and frequent contact, once an application is received." We view this as an essential technique, as many departments typically lose a significant portion of applicants as they proceed through the qualification process. While the consultants were not provided with a precise yield/conversion rate for the department, the information provided suggests that the department is maximizing the number of applicants who remain interested and motivated to complete the hiring process.

Quickly inviting an applicant for an initial interview is critically important. Most police departments defuse responsibility for recruitment widely and thereby cause unnecessary delay in the process. Allowing an applicant to linger for an extended period greatly increases the risk that the applicant will decline any offer of employment and simply look elsewhere. Applicants today have many employment choices and police departments actively compete with one another to attract and secure the most qualified applicants. The Deputy Director and the Records supervisor conduct initial interviews.

Applicants are vetted through open conversation, and also scheduled for ride-alongs with patrol officers. The informal communications between applicants and members of the department through these conversations and e-mail correspondence provide great insight and very useful information on applicants; offers of employment are only provided to applicants who appear to be a "good fit." The EMPD has a clear profile of desired qualities for applicants. The department's hands-on, aggressive approach has proven to be quite effective in today's competitive market.

As part of its overall recruitment plan, the department should develop and/or strengthen relationships with colleges and universities that offer degrees in criminal justice and public administration. Casual contact is insufficient and likely to yield few tangible results. We recommend instead that the department reach out to full-time faculty in criminal justice programs throughout the region, particularly full-time professors with prior law-enforcement experience. In addition to simply attending job fairs on campus and handing out pamphlets, uniformed members of the department should request the opportunity to meet with and present to criminal justice club members. Such efforts were not necessary several years ago but in light of the current reality, every effort should be made to make meaningful connections and to distinguish the EMPD in the minds of potential applicants.

CPSM was advised that the department's salaries were always relatively competitive relative to those of other departments in the region. When asked about recruitment, one member of the department indicated "the last four years has been quite a struggle" and suggested that the department "hasn't done so well." Nevertheless, the department has made extensive use of qualified lateral applicants. Financial incentives and competitive salary based upon years of service have attracted a steady stream of qualified lateral applicants.

A review of the department's hiring records over the last several years indicates that virtually all uniformed hires were laterals (i.e., individuals with several years of service at another law enforcement agency). Members of the department confirmed that this has indeed been the department's hiring philosophy and strategy in recent years. CPSM applauds the department for these efforts and views this as an intelligent strategy that not all American police departments can undertake. The department's success in attracting laterals suggests that the EMPD is in fact a "destination department" where seasoned police professionals from other agencies are attracted to the EMPD for reasons such as competitive salary and benefits, organizational culture, quality of life, etc.

Historically, the city has not utilized signing bonuses to attract laterals, but this recruitment strategy is now being considered. We note that this strategy has become a trend for police departments in many regions across the United States. The department should continue to closely monitor signing bonuses that are being offered by other police departments in the region in order to maintain a competitive market advantage.

The department's police assistant program has proven to be a particularly effective recruitment and evaluation tool. Two police assistants are currently scheduled to attend the police academy this May and two other former EMPD police assistants are currently employed by the department as uniformed police officers.

The Deputy Director conducts background investigations of police applicants.

Recruitment and Retention Recommendations:

- The department should record and consistently monitor its application yield rate and perform comparisons from year to year. This information, combined with accurate data concerning the number of police applicants each year, can provide meaningful data that will speak to the department's relative degree of success in attracting and securing qualified police officers. (Recommendation No. 49.)
- As part of its overall recruitment plan, the department should develop and/or strengthen. relationships with colleges and universities that offer degrees in criminal justice and public administration. (Recommendation No. 50.)

SECTION 6. CONCLUSION

The El Mirage Police Department is an excellent organization. The quality of management and commitment of its personnel to public safety and improving the quality of life in the community is outstanding. The recommendations contained in this report should be viewed as improvement opportunities and possibilities for improving an already well-performing organization.

CPSM believes that a modification of the current patrol schedule is warranted and will result in cost savings to the department and improved operational efficiency. There are also several opportunities to add personnel in key positions to improve operations.

The EMPD should build on its strengths as a professional and well-run organization. Officers receive state-of-the-art training, they are appropriately managed and supervised, the level of dedication and commitment is outstanding, and the policies and procedures of the organization are sound. Furthermore, rank-and-file officers view the administration as open to and capable of reinvigorating the workforce and improving the overall operations of the department. The combination of all these forces put the EMPD in an excellent position to continue to provide the El Mirage community with top-notch police services.

§ § §

SECTION 7. DATA ANALYSIS

This data analysis on police patrol operations for the El Mirage 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 recorded by the Tolleson Police Department's computer-aided dispatch (CAD) system.

CPSM collected data for one year from January 1, 2021, through December 31, 2021. The majority of the first section of the report, concluding with Table 7-9, uses call data for one year. For the detailed workload analysis, we use two eight-week sample periods. The first period is from January 4 through February 28, 2021, or winter, and the second period is from July 7 through August 31, 2021, 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 test 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., 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 patrolrelated events.
- 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 unit 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 several issues when analyzing El Mirage's dispatch data. We made assumptions and decisions to address these issues.

- 483 events (about 2 percent) involved patrol units spending zero time on scene.
- 2 calls lacked accurate busy times. We excluded these calls when evaluating busy times and work hours.



The computer-aided dispatch (CAD) system used approximately 127 different event descriptions, which we condensed into 18 categories for our tables and 13 categories for our figures (shown in Chart 7-1). Table 7-20 in the appendix shows how each call description was categorized.

Between January 1, 2021, and December 31, 2021, the communications center recorded 23,667 events involving a responding patrol unit. When measured daily, the department was dispatched to an average of 64.8 patrol-related events per day, approximately 2 percent of which (1.3 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 7-1: Event Descriptions for Tables and Figures

Table Category	Figure Category
Alarm	Alarm
Assist other agency	Assist
Check	Check
Civil matter	Civil matter
Crime-person	Crime
Crime-property	Clime
Custody/warrant	Custody/warrant
Directed patrol	Directed patrol
Disturbance	Disturbance
Drug	Drug
Animal	
Citizen assist	Conoral nonoriminal
Follow-up	General noncriminal
Miscellaneous	
Investigation	Investigation
Suspicious incident	Suspicious incident
Accident	Traffic
Traffic enforcement	Traffic

2.0% Community-initiated Police-initiated Zero on scene - 48.6% 49.4%

FIGURE 7-1: Percentage Events per Day, by Initiator

Note: Percentages are based on a total of 23,667 events.

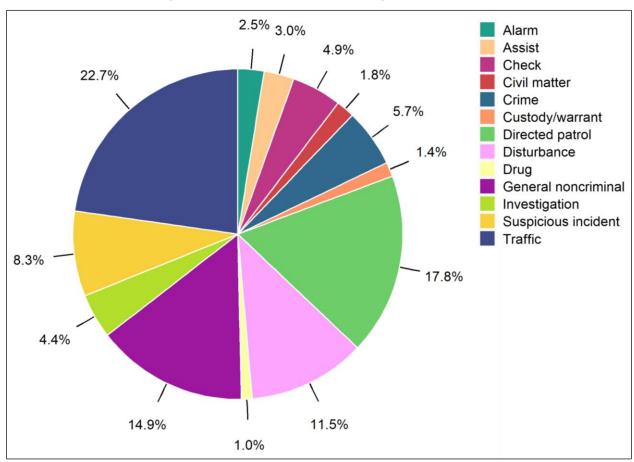
TABLE 7-1: Events per Day, by Initiator

Initiator	No. of Events	Events per Day
Community-initiated	11,500	31.5
Police-initiated	11,684	32.0
Zero on scene	483	1.3
Total	23,667	64.8

Observations:

- 2 percent of the events had zero time on scene.
- 49 percent of all events were police-initiated.
- 49 percent of all events were community-initiated.
- There was an average of 65 events per day or 2.7 per hour.

FIGURE 7-2: Percentage Events per Day, by Category



Note: The figure combines categories in the following table according to the description in Chart 7-1.

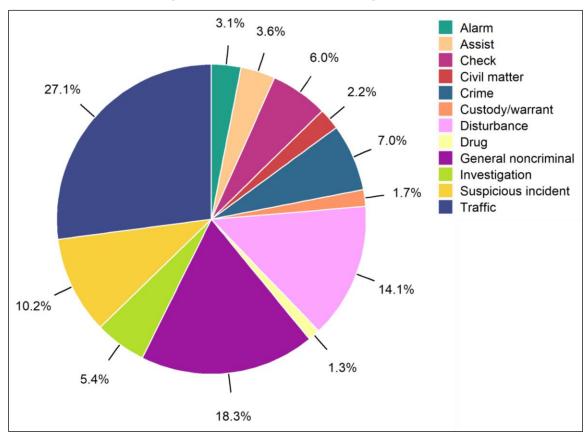
TABLE 7-2: Events per Day, by Category

Category	No. of Events	Events per Day
Accident	648	1.8
Alarm	603	1.7
Animal	217	0.6
Assist other agency	699	1.9
Check	1,159	3.2
Citizen assist	1,010	2.8
Civil matter	428	1.2
Crime-person	375	1.0
Crime-property	969	2.7
Custody/warrant	333	0.9
Directed patrol	4,211	11.5
Disturbance	2,729	7.5
Drug	247	0.7
Follow-up	1,054	2.9
Investigation	1,041	2.9
Miscellaneous	1,235	3.4
Suspicious incident	1,973	5.4
Traffic enforcement	4,736	13.0
Total	23,667	64.8

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

- The top four categories accounted for 67 percent of events.
 - □ 23 percent of events were traffic-related.
 - □ 18 percent of events were for directed patrol activities.
 - □ 15 percent of events were general noncriminal activities.
 - □ 12 percent of events were disturbances.
- 6 percent of events were crimes.

FIGURE 7-3: Percentage Calls per Day, by Category



Note: The figure combines categories in the following table according to the description in Chart 7-1.

TABLE 7-3: Calls per Day, by Category

Category	No. of Calls	Calls per Day
Accident	641	1.8
Alarm	585	1.6
Animal	207	0.6
Assist other agency	687	1.9
Check	1,142	3.1
Citizen assist	1,003	2.7
Civil matter	425	1.2
Crime-person	372	1.0
Crime-property	959	2.6
Custody/warrant	332	0.9
Disturbance	2,685	7.4
Drug	243	0.7
Follow-up	1,045	2.9
Investigation	1,020	2.8
Miscellaneous	1,219	3.3
Suspicious incident	1,938	5.3
Traffic enforcement	4,507	12.3
Total	19,010	52.1

Note: The focus here is on recorded calls rather than recorded events. We removed 515 events with zero time on scene and an additional 4,172 directed patrol activities.

- On average, there were 52.1 calls per day, or 2.2 per hour.
- The top four categories (traffic, general noncriminal, disturbance, and suspicious incident) accounted for 70 percent of calls.
 - □ 27 percent of calls were traffic-related.
 - □ 18 percent of calls were general noncriminal calls.
 - □ 14 percent of calls were disturbances.
 - □ 10 percent of calls were suspicious incidents.
- 7 percent of calls were crimes.

FIGURE 7-4: Calls per Day, by Initiator and Month

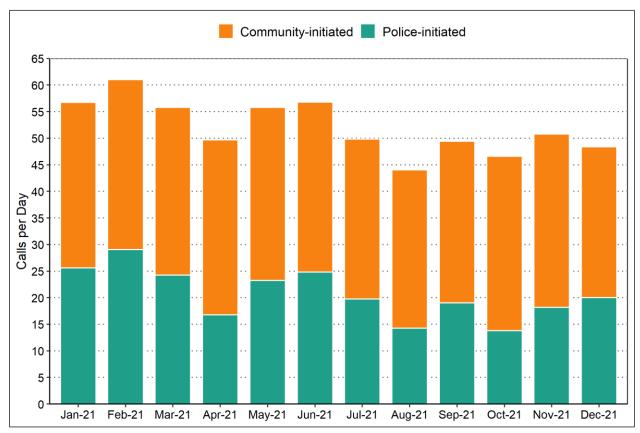
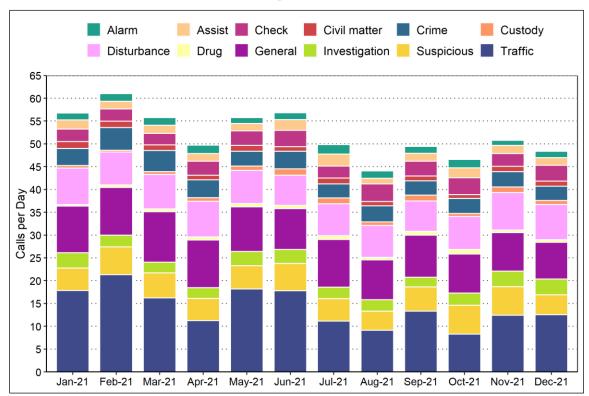


TABLE 7-4: Calls per Day, by Initiator and Months

Initiator	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Community	31.2	31.9	31.5	33.0	32.5	32.2	30.1	29.9	30.4	32.9	32.7	28.5
Police	25.7	29.1	24.3	16.8	23.2	24.9	19.8	14.3	19.0	13.8	18.2	20.1
Total	56.8	61.0	55.8	49.7	55.7	57.1	49.9	44.2	49.4	46.7	50.9	48.5

- The number of calls per day was lowest in August.
- The number of calls per day was highest in February.
- The months with the most calls had 38 percent more calls than the months with the fewest calls.
- February had the most police-initiated calls, with 111 percent more than October, which had the fewest.
- April, October, and November had the most community-initiated calls, with 16 percent more than December, which had the fewest.

FIGURE 7-5: Calls per Day, by Category and Month



Note: The figure combines categories in the following table according to the description in Chart 7-1.

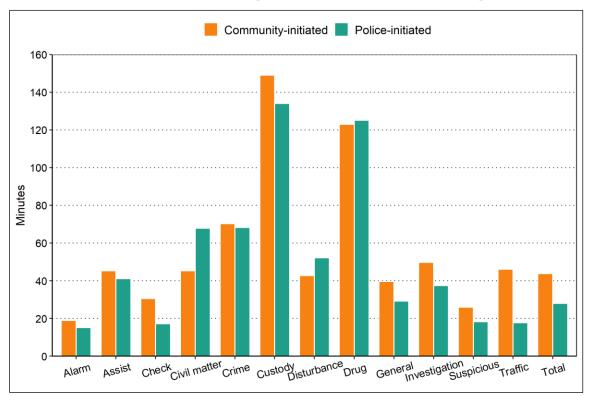
TABLE 7-5: Calls per Day, by Category and Month

Category	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Accident	1.1	1.5	1.5	2.0	2.2	1.8	1.6	1.4	2.0	1.7	2.3	2.0
Alarm	1.5	1.6	1.7	1.8	1.4	1.5	2.1	1.7	1.5	1.9	1.2	1.4
Animal	0.6	0.5	0.5	0.8	0.7	0.4	0.7	0.6	0.3	0.6	0.9	0.5
Assist other agency	2.0	1.7	1.8	1.7	1.6	2.4	2.6	1.3	1.7	2.2	1.8	1.7
Check	2.7	2.7	2.5	3.1	3.2	3.6	2.6	3.9	3.2	3.8	2.8	3.5
Citizen assist	2.6	2.3	3.3	3.2	3.0	2.7	3.2	2.5	2.7	2.6	2.6	2.2
Civil matter	1.5	1.4	1.2	1.0	1.3	1.0	1.3	1.0	1.1	0.8	1.2	1.1
Crime-person	0.8	1.0	1.3	1.2	0.9	0.9	0.9	1.1	1.4	0.8	1.0	0.9
Crime-property	2.9	3.9	3.4	2.7	2.3	3.0	2.2	2.5	1.7	2.5	2.4	2.2
Custody/warrant	0.6	0.4	0.6	0.8	0.9	1.4	1.3	0.8	1.3	0.7	1.2	0.9
Disturbance	7.9	7.2	7.5	7.8	7.3	6.6	7.0	7.0	6.7	7.2	8.3	7.7
Drug	0.4	0.5	0.6	0.7	0.7	0.7	0.8	0.5	0.8	1.0	0.6	0.5
Follow-up	2.9	3.6	3.8	3.5	3.1	2.8	2.4	2.6	3.0	2.4	2.3	2.0
Investigation	3.3	2.5	2.4	2.4	3.1	3.1	2.5	2.5	2.1	2.6	3.4	3.5
Miscellaneous	4.1	4.0	3.5	2.9	3.0	3.1	4.1	3.0	3.2	3.0	2.7	3.4
Suspicious incident	4.9	6.1	5.5	4.9	5.1	6.0	4.9	4.2	5.3	6.3	6.2	4.3
Traffic enforcement	16.8	19.9	14.7	9.2	16.0	16.1	9.6	7.7	11.3	6.5	10.2	10.6
Total	56.8	61.0	55.8	49.7	55.7	57.1	49.9	44.2	49.4	46.7	50.9	48.5

Note: Calculations were limited to calls rather than events.

- The top four categories averaged between 65 and 74 percent of all calls throughout the year:
 - □ Traffic calls averaged between 8.3 and 21.4 calls per day throughout the year.
 - General noncriminal calls averaged between 8.1 and 11.1 calls per day throughout the year.
 - □ Disturbances averaged between 6.6 and 8.3 calls per day throughout the year.
 - □ Suspicious incidents averaged between 4.2 and 6.3 calls per day throughout the year.
- Crime calls averaged between 3.1 and 5.0 calls per day and accounted for 6 to 8 percent of total calls throughout the year.

FIGURE 7-6: 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 7-1.

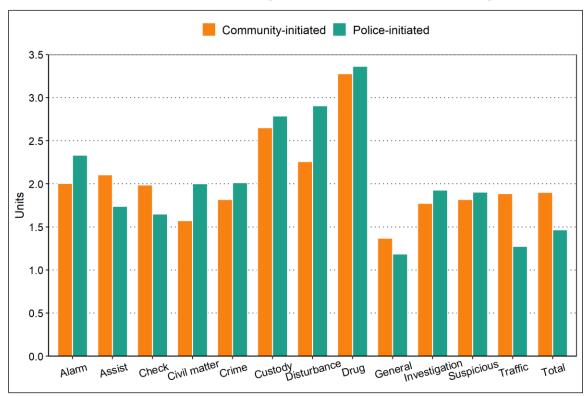
TABLE 7-6: Primary Unit's Average Occupied Times, by Category and Initiator

Contagnam	Community	-Initiated	Police-Ini	itiated
Category	Minutes	Calls	Minutes	Calls
Accident	59.2	608	44.9	33
Alarm	19.0	582	15.2	3
Animal	27.4	190	21.5	17
Assist other agency	45.2	561	41.0	126
Check	30.5	1,019	17.2	123
Citizen assist	35.8	845	22.2	158
Civil matter	45.3	420	67.8	5
Crime-person	89.2	352	129.8	19
Crime-property	62.8	906	46.1	53
Custody/warrant	148.7	120	134.0	212
Disturbance	42.8	2,591	52.1	94
Drug	122.9	72	125.1	171
Follow-up	42.1	312	44.8	732
Investigation	49.7	771	37.3	249
Miscellaneous	50.9	418	16.4	801
Suspicious incident	25.9	1,239	18.2	699
Traffic enforcement	28.3	444	17.5	4,063
Weighted Average/Total Calls	43.8	11,450	28.0	7,558

Note: For this table, we removed two calls with inaccurate busy times. The information in Figure 7-6 and Table 7-6 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 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. Observations below refer to times shown within the figure rather than the table.

- A unit's average time spent on a call ranged from 15 to 149 minutes overall.
- The longest average times were for community-initiated custody/warrant calls.
- The average time spent on crime calls was 70 minutes for community-initiated calls and 68 minutes for police-initiated calls.

FIGURE 7-7: Number of Responding Units, by Initiator and Category



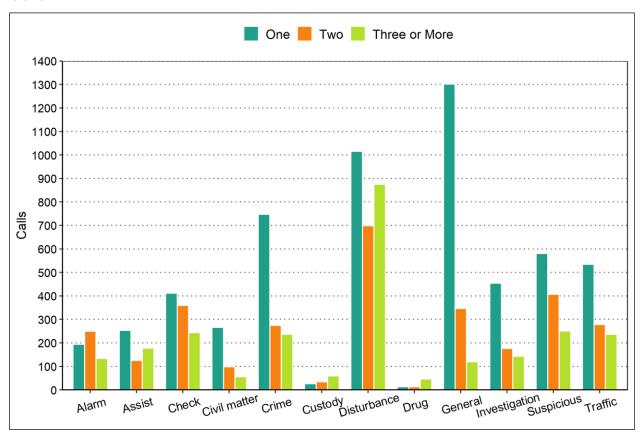
Note: The figure combines categories using weighted averages from the following table according to the description in Chart 7-1.

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

Cataman	Community-I	nitiated	Police-Initi	ated
Category	No. of Units	Calls	No. of Units	Calls
Accident	2.2	608	2.2	33
Alarm	2.0	582	2.3	3
Animal	1.4	190	1.2	17
Assist other agency	2.1	561	1.7	126
Check	2.0	1,019	1.7	123
Citizen assist	1.3	845	1.3	158
Civil matter	1.6	420	2.0	5
Crime-person	2.2	353	3.2	19
Crime-property	1.7	906	1.6	53
Custody/warrant	2.6	120	2.8	212
Disturbance	2.3	2,591	2.9	94
Drug	3.3	72	3.4	171
Follow up	1.2	313	1.2	732
Investigation	1.8	771	1.9	249
Miscellaneous	1.7	418	1.2	801
Suspicious incident	1.8	1,239	1.9	699
Traffic enforcement	1.5	444	1.3	4,063
Weighted Average/Total Calls	1.9	11,452	1.5	7,558

Note: The information in Figure 7-7 and Table 7-7 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 7-8: 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 7-1.

TABLE 7-8: Number of Responding Units, by Category, Community-initiated Calls

Catanani	R	espon	ding Units
Category	One	Two	Three or More
Accident	219	204	185
Alarm	192	253	137
Animal	132	43	15
Assist other agency	253	129	179
Check	411	363	245
Citizen assist	652	161	32
Civil matter	266	98	56
Crime-person	182	76	95
Crime-property	567	198	141
Custody/warrant	27	34	59
Disturbance	1,015	700	876
Drug	13	13	46
Follow-up	267	33	13
Investigation	452	176	143
Miscellaneous	251	108	59
Suspicious incident	581	407	251
Traffic enforcement	315	77	52
Total	5,795	3,073	2,584

- The overall mean number of responding units was 1.5 for police-initiated calls and 1.9 for community-initiated calls.
- The mean number of responding units was as high as 3.4 for drug calls that were policeinitiated.
- 51 percent of community-initiated calls involved one responding unit.
- 27 percent of community-initiated calls involved two responding units.
- 23 percent of community-initiated calls involved three or more responding units.
- The largest group of calls with three or more responding units involved disturbances.

Call Activity Workload 36.2% 33.9% -30.1% 2.4% -~30.0% 2.9% 3.2% 3.1% 13.6% 16.4% 14.0% 14.3% 11 12 13 14 Police station Other

FIGURE 7-9: Percentage Calls and Work Hours, by Beat

Note: The other category included calls missing beat information, and a few calls within the following beats: ELM, OOC, and TOLL.

TABLE 7-9: Calls and Work Hours by Beat, per Day

Beat	F	Per Day	Area	Population	
bear	Calls	Work Hours	(Sq. Miles)	(2020)	
11	17.7	19.9	1.3	11,034	
12	15.7	16.5	1.3	10,964	
13	7.3	7.9	2.0	8,010	
14	8.5	7.5	5.3	5,100	
Police station	1.7	1.7	NA	NA	
Miscellaneous	0.3	0.4	NA	NA	
Unknown	1.0	1.2	NA	NA	
Total	52.1	55.1	9.9	35,108	

- Beat 11 had the most calls (17.7 per day) and workload (19.9 hours per day), and it accounted for 34 percent of total calls and 36 percent of total workload.
- Excluding calls within the other category or at headquarters, an even distribution would allot 12.3 calls and 13.0 work hours per beat.

FIGURE 7-10: Percentage Calls and Work Hours, by Category, Winter 2021

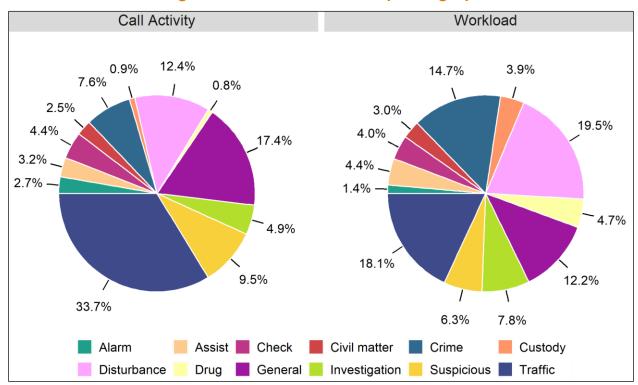


TABLE 7-10: Calls and Work Hours per Day, by Category, Winter 2021

Catagoni	F	er Day
Category	Calls	Work Hours
Accident	1.2	2.6
Alarm	1.6	0.8
Animal	0.5	0.3
Assist other agency	1.9	2.4
Check	2.6	2.2
Citizen assist	2.5	1.8
Civil matter	1.5	1.6
Crime-person	0.9	2.0
Crime-property	3.5	6.0
Custody/warrant	0.5	2.1
Disturbance	7.3	10.7
Drug	0.5	2.6
Follow-up	3.2	2.3
Investigation	2.9	4.3
Miscellaneous	4.0	2.3
Suspicious incident	5.6	3.4
Traffic enforcement	18.6	7.3
Total	58.8	54.5

Note: Workload calculations focused on calls rather than events.

Observations, Winter:

- The average number of calls per day and the average daily workload were higher in winter than in summer.
- Total calls averaged 59 per day or 2.5 per hour.
- Total workload averaged 55 hours per day, meaning that on average 2.3 units per hour were busy responding to calls.
- Traffic calls constituted 34 percent of calls and 18 percent of workload.
- General noncriminal calls constituted 17 percent of calls and 12 percent of workload.
- Disturbances constituted 12 percent of calls and 20 percent of workload.
- Suspicious incidents constituted 9 percent of calls and 6 percent of workload.
- These top four categories constituted 73 percent of calls and 56 percent of workload.
- Crime calls constituted 8 percent of calls and 15 percent of workload.

FIGURE 7-11: Percentage Calls and Work Hours, by Category, Summer 2021

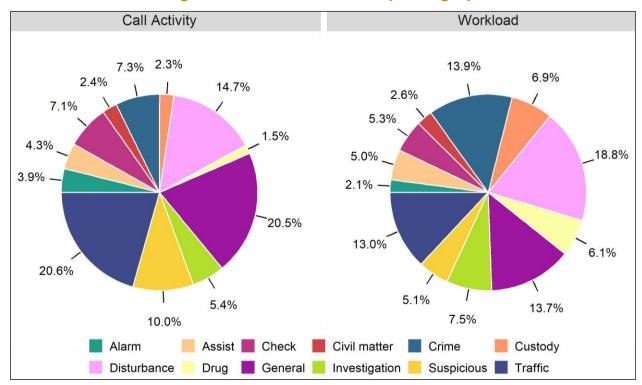


TABLE 7-11: Calls and Work Hours per Day, by Category, Summer 2021

Code	F	er Day
Category	Calls	Work Hours
Accident	1.5	2.5
Alarm	1.8	1.1
Animal	0.6	0.4
Assist other agency	1.9	2.6
Check	3.2	2.7
Citizen assist	2.7	2.2
Civil matter	1.1	1.3
Crime-person	1.0	3.2
Crime-property	2.4	3.9
Custody/warrant	1.1	3.5
Disturbance	6.7	9.6
Drug	0.7	3.1
Follow-up	2.5	2.4
Investigation	2.5	3.8
Miscellaneous	3.5	2.0
Suspicious incident	4.6	2.6
Traffic enforcement	7.9	4.2
Total	45.7	50.9

Note: Workload calculations focused on calls rather than events.

Observations, Summer:

- Total calls averaged 46 per day or 1.9 per hour.
- Total workload averaged 51 hours per day, meaning that on average 2.1 units per hour were busy responding to calls.
- Traffic calls constituted 21 percent of calls and 13 percent of workload.
- General noncriminal calls constituted 21 percent of calls and 14 percent of workload.
- Disturbances constituted 15 percent of calls and 19 percent of workload.
- Suspicious incidents constituted 10 percent of calls and 5 percent of workload.
- These top four categories constituted 66 percent of calls and 51 percent of workload.
- Crime calls constituted 7 percent of calls and 14 percent of workload.

NONCALL ACTIVITIES

In the period from January 1, 2021, through December 31, 2021, the dispatch center recorded activities that were not assigned call numbers. We focused on those noncall activities that involved a patrol unit. 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, 12,243 activities remained. These activities had an average duration of 62.0 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 7-12: Activities and Occupied Times by Description

Status	Description	Occupied Time	Count
	Briefing	74.9	189
	Paperwork	74.6	87
Fuel Paperwork Administrative - Weighter 103 BUSY Personal - Weighted	Training	105.2	17
	Miscellaneous*	40.1	23
	Other*	68.8	825
	No description	60.7	394
	103 (At station)	63.9	5,131
BUSY C7 Personal - Weighted	Briefing	66.7	1,067
	Fuel	8.8	157
	Paperwork	79.6	1,115
	Training	134.5	132
	Miscellaneous**	59.7	377
	Other	54.6	492
	No description	42.3	19
Fuel	Fuel	8.5	349
Paperwork	Paperwork	69.2	821
Administrative - Weigh	ed Average/Total Activities	64.4	11,195
103	Meal break	24.3	2
BUSY	Meal break	33.2	101
C7	Meal break	37.0	945
Personal - Weighted	Average/Total Activities	36.6	1,048
Weighted Aver	age/Total Activities	62.0	12,243

Note: *For status "103," the "miscellaneous" subcategory included activities with low-frequency descriptions; for example, impounding property, special detail, and court-ordered fingerprints. The "other" category included activities mostly with vehicle number only. **For status "busy," the "miscellaneous" category also included activities with lowfrequency descriptions; for example, fire station, special detail, and quick detail. The "other" category mostly included activities with locations as descriptions.

- There were approximately 31 administrative activities per day that averaged 64 minutes.
- There were approximately 3 personal out-of-service activities per day. These were mostly for meal breaks and lasted 37 minutes on average.

FIGURE 7-12: Activities per Day, by Month

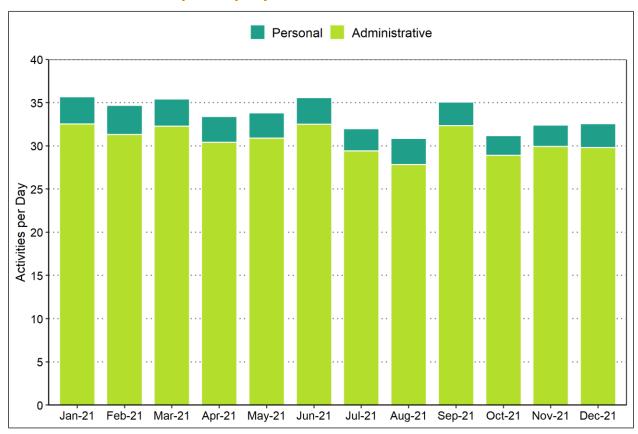


TABLE 7-13: Activities per Day, by Month

Activities	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Administrative	32.5	31.3	32.3	30.4	30.9	32.5	29.4	27.8	32.3	28.9	29.9	29.8
Personal	3.1	3.4	3.1	3.0	2.9	3.1	2.6	3.0	2.7	2.3	2.5	2.8
Total	35.7	34.7	35.4	33.4	33.8	35.6	32.0	30.9	35.1	31.2	32.4	32.6

- The number of activities per day was lowest in August and October.
- The number of activities per day was highest in January and June.

FIGURE 7-13: Activities per Day, by Day of Week

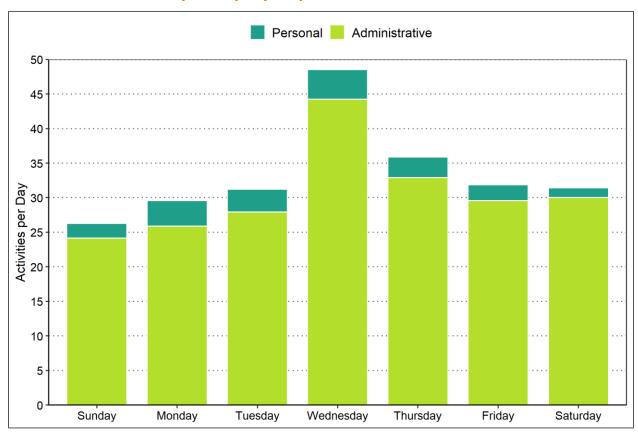


TABLE 7-14: Activities per Day, by Day of Week

Day of Week	Administrative	Personal	Activities per Day
Sunday	24.1	2.2	26.3
Monday	25.9	3.7	29.6
Tuesday	27.9	3.3	31.2
Wednesday	44.2	4.3	48.5
Thursday	32.9	3.0	35.9
Friday	29.6	2.3	31.9
Saturday	30.0	1.4	31.4
Weekly Average	30.7	2.9	33.5

- The number of activities per day was lowest on Sundays.
- The number of activities per day was highest on Wednesdays.

FIGURE 7-14: Activities per Day, by Hour of Day

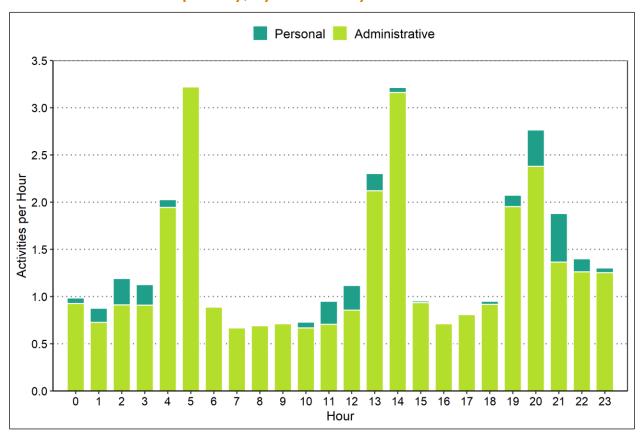


TABLE 7-15: Activities per Hour, by Hour of Day

Hour	Personal	Administrative	Total
0	0.06	0.93	0.98
1	0.15	0.73	0.88
2	0.28	0.91	1.19
3	0.22	0.91	1.13
4	0.08	1.94	2.02
5	0.00	3.22	3.22
6	0.00	0.89	0.89
7	0.00	0.67	0.67
8	0.01	0.69	0.70
9	0.00	0.71	0.71
10	0.06	0.67	0.73
11	0.24	0.70	0.95
12	0.26	0.85	1.12
13	0.18	2.12	2.30
14	0.05	3.16	3.21
15	0.02	0.93	0.95
16	0.01	0.71	0.72
17	0.01	0.81	0.81
18	0.03	0.92	0.95
19	0.12	1.95	2.07
20	0.39	2.38	2.76
21	0.52	1.36	1.88
22	0.14	1.26	1.40
23	0.05	1.25	1.30
Hourly Average	0.12	1.28	1.40

- The number of activities per hour was highest between 5:00 a.m. and 6:00 a.m. and between 2:00 p.m. and 3:00 p.m.
- The number of activities per hour was lowest between 7:00 a.m. and 8:00 a.m.

DEPLOYMENT

For this study, we examined deployment information for eight weeks in winter (January 4 through February 28, 2021) and eight weeks in summer (July 7 through August 31, 2021). The department's main patrol force consists of patrol units (one-officer and two-officer units) and (officer-in-training) OIT units. In 2021, they operated on 10-hour shifts starting at 5:00 a.m., noon, 2:00 p.m., and 8:00 p.m. The police department's main patrol force deployed an average of 5.7 units per hour during the 24-hour day in winter and 5.1 units per hour in summer 2021. When additional units, including a K-9 unit, police assistants, and a reserve officer, were included, the department averaged 5.8 units per hour during the 24-hour day in winter 2021 and 5.9 units in summer 2021.

In this section, we describe the deployment and workload in distinct steps, distinguishing between summer and winter 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, 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 7-15: Deployed Units, Weekdays, Winter 2021

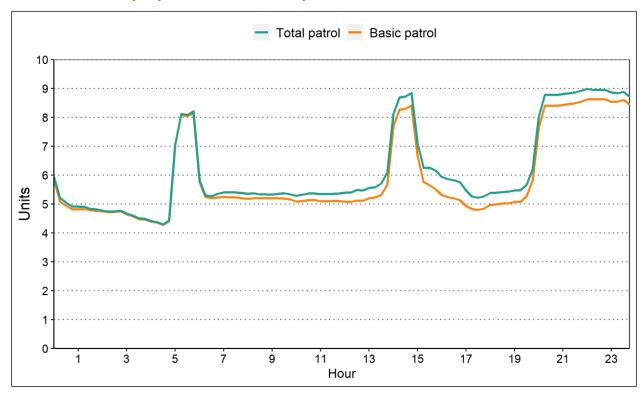


FIGURE 7-16: Deployed Units, Weekends, Winter 2021

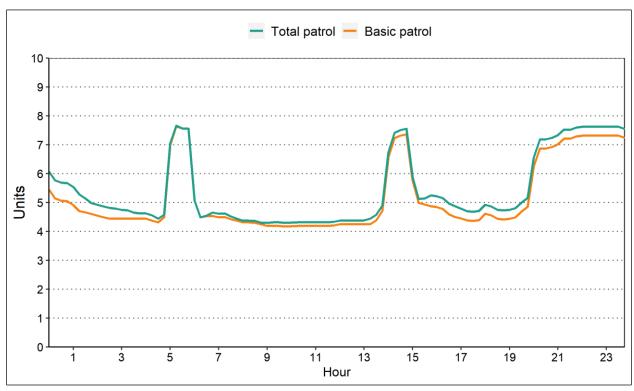


FIGURE 7-17: Deployed Units, Weekdays, Summer 2021

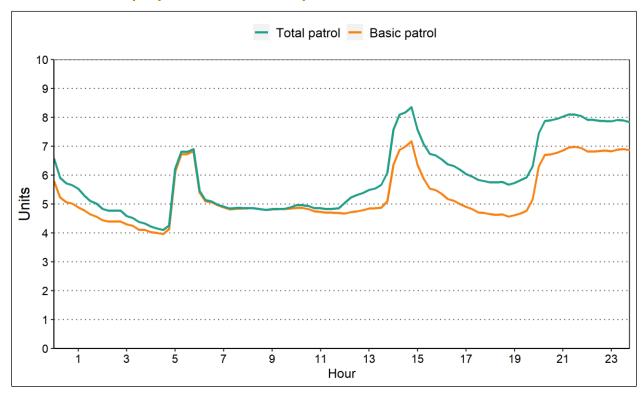


FIGURE 7-18: Deployed Units, Weekends, Summer 2021



- For Winter (January 4 through February 28, 2021):
 - □ The average deployment was 6.2 units per hour during the week and 5.4 units per hour on the weekend.
 - □ Average deployment varied from 4.3 to 9.0 units per hour on weekdays and 4.3 to 7.7 units per hour on weekends.
- For Summer (July 7 through August 31, 2021):
 - □ The average deployment was 5.9 units per hour during the week and 5.3 units per hour on the weekend.
 - □ Average deployment varied from 4.1 to 8.4 units per hour on weekdays and 3.9 to 7.2 units per hour on weekends.

FIGURE 7-19: Deployment and All Workload, Weekdays, Winter 2021

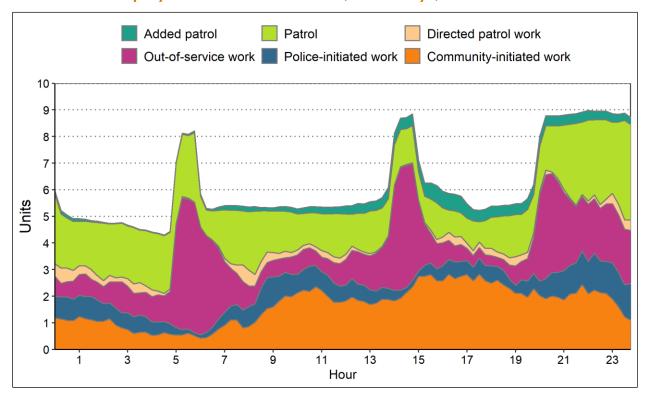


FIGURE 7-20: Deployment and All Workload, Weekends, Winter 2021

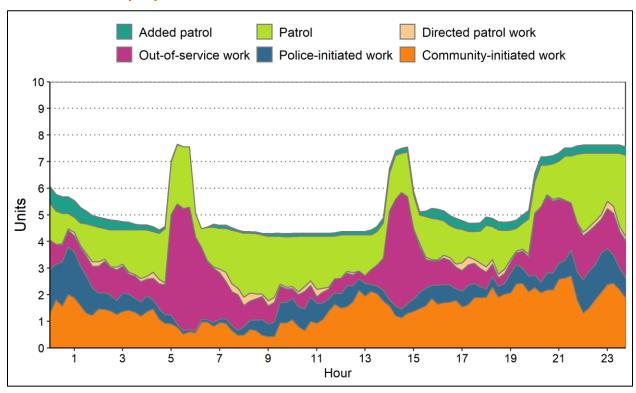


FIGURE 7-21: Deployment and All Workload, Weekdays, Summer 2021

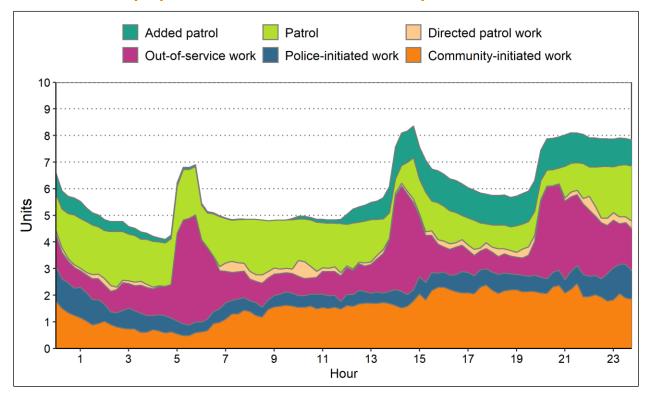
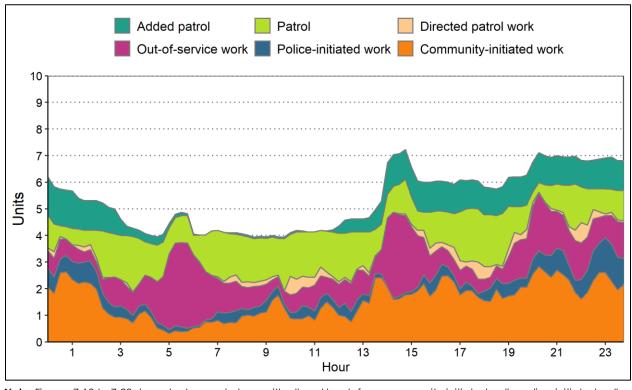


FIGURE 7-22: Deployment and All Workload, Weekends, Summer 2021



Note: Figures 7-19 to 7-22 show deployment along with all workloads from community-initiated calls, police-initiated calls, out-of-service work, and directed patrol work.

Winter:

- Community-initiated work:
 - Average community-initiated workload was 1.7 units per hour during the week and 1.5 units per hour on weekends.
 - This was approximately 27 percent of hourly deployment during the week and 27 percent of hourly deployment on weekends.

All work:

- Average workload was 4.1 units per hour during the week and 3.6 units per hour on weekends.
- □ This was approximately 67 percent of hourly deployment during the week and 66 percent of hourly deployment on weekends.

Summer:

- Community-initiated work:
 - Average community-initiated workload was 1.6 units per hour during the week and 1.6 units per hour on weekends.
 - This was approximately 26 percent of hourly deployment during the week and 29 percent of hourly deployment on weekends.

■ All work:

- □ Average workload was 3.8 units per hour during the week and 3.3 units per hour on weekends.
- This was approximately 65 percent of hourly deployment during the week and 62 percent of hourly deployment on weekends.

FIGURE 7-23: Percentage of Workload, Weekdays, Winter 2021

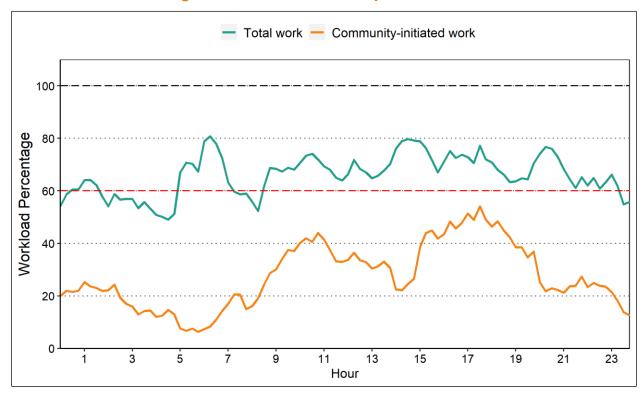


FIGURE 7-24: Percentage of Workload, Weekends, Winter 2021

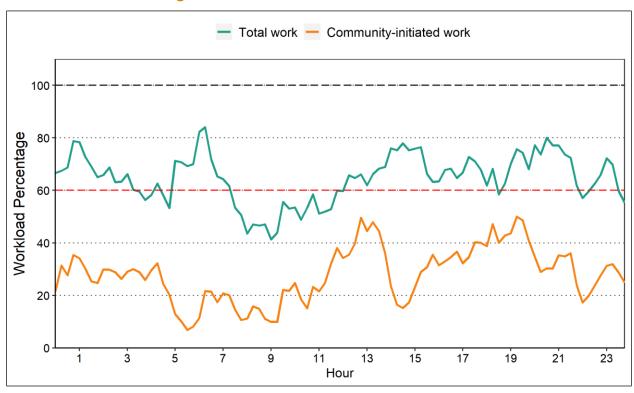


FIGURE 7-25: Percentage of Workload, Weekdays, Summer 2021

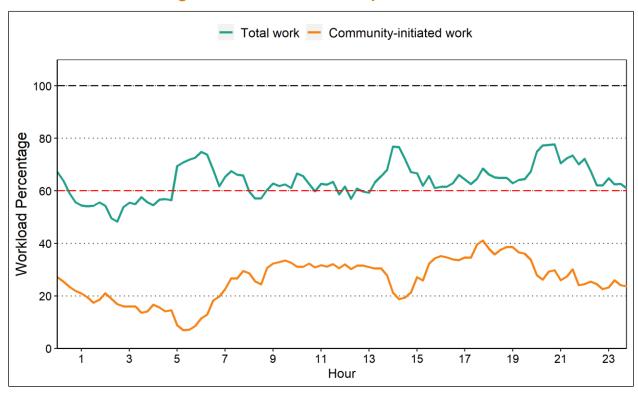
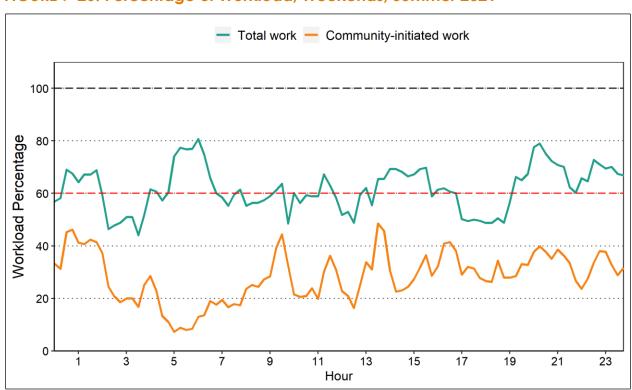


FIGURE 7-26: Percentage of Workload, Weekends, Summer 2021



Winter:

- Community-initiated work:
 - During the week, workload reached a maximum of 54 percent of deployment between 5:30 p.m. and 5:45 p.m.
 - On weekends, workload reached a maximum of 50 percent of deployment between 12:45 p.m. and 1:00 p.m. and between 7:15 p.m. and 7:30 p.m.

All work:

- During the week, workload reached a maximum of 81 percent of deployment between 6:15 a.m. and 6:30 a.m.
- □ On weekends, workload reached a maximum of 84 percent of deployment between 6:15 a.m. and 6:30 a.m.

Summer:

- Community-initiated work:
 - During the week, workload reached a maximum of 41 percent of deployment between 5:45 p.m. and 6:00 p.m.
 - On weekends, workload reached a maximum of 49 percent of deployment between 1:30 p.m. and 1:45 p.m.

All work:

- During the week, workload reached a maximum of 78 percent of deployment between 8:15 p.m. and 8:45 p.m.
- On weekends, workload reached a maximum of 81 percent of deployment between 6:00 a.m. and 6:15 a.m.

RESPONSE TIMES

We analyzed the response times to various types of calls, separating the duration into dispatch processing 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 processing and travel time. Dispatch processing 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.

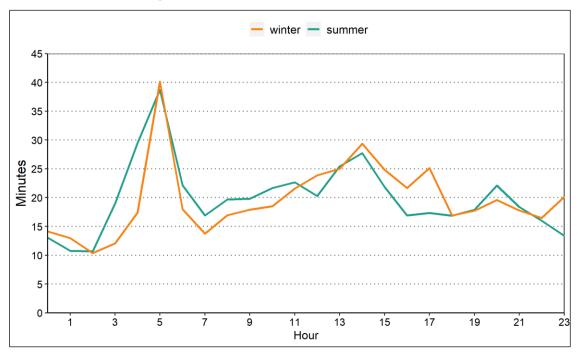
We begin the discussion with statistics that include all calls combined. We started with 3,295 calls for winter and 2,557 calls for summer. We limited our analysis to community-initiated calls, which amounted to 1,746 calls for winter and 1,651 calls for summer. Also, we removed calls lacking a recorded arriving unit and calls located at headquarters. We were left with 1,621 calls in winter and 1,542 calls in summer for our analysis. For the entire year, we began with 19,010 calls, and limited our analysis to 11,452 community-initiated calls. With similar exclusions, we were left with 10,731 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 the 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 versus summer), we show differences in response times by category.

FIGURE 7-27: Average Response Times, by Hour of Day, Winter and Summer 2021



- Average response times varied significantly by the hour of the day.
- In winter, the longest response times were between 5:00 a.m. and 6:00 a.m., with an average of 40.1 minutes.
- In winter, the shortest response times were between 2:00 a.m. and 3:00 a.m., with an average of 10.4 minutes.
- In summer, the longest response times were between 5:00 a.m. and 6:00 a.m., with an average of 38.7 minutes.
- In summer, the shortest response times were between 2:00 a.m. and 3:00 a.m., with an average of 10.7 minutes.

FIGURE 7-28: Average Response Time by Category, Winter 2021

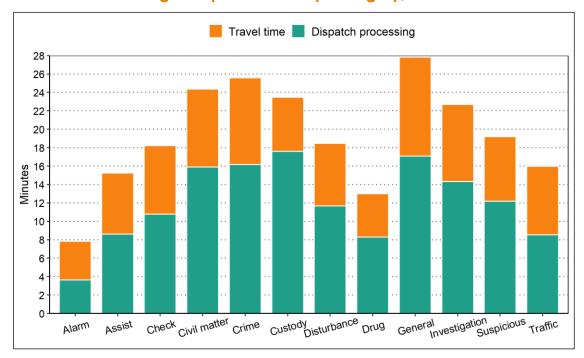


FIGURE 7-29: Average Response Time by Category, Summer 2021

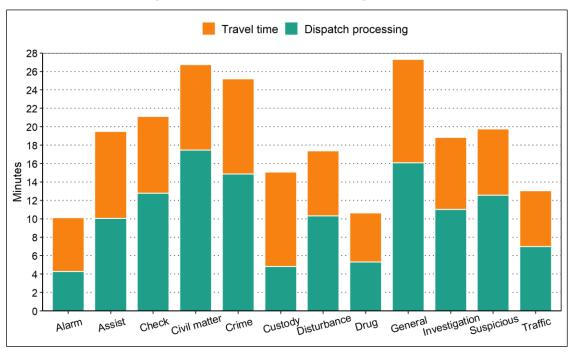


TABLE 7-16: Average Response Time Components, by Category

		Wi	nter			Summer				
Category	Minutes			Count		Minute	s	Count		
	Dispatch	Travel	Response	Count	Dispatch	Travel	Response	Couni		
Accident	8.3	8.4	16.7	61	6.2	5.5	11.7	72		
Alarm	3.6	4.2	7.8	89	4.3	5.8	10.1	100		
Animal	16.0	9.0	25.0	21	20.0	9.6	29.6	28		
Assist other agency	8.6	6.6	15.2	77	10.0	9.4	19.5	79		
Check	10.8	7.4	18.2	115	12.8	8.3	21.1	156		
Citizen assist	13.5	9.0	22.5	100	14.5	10.5	25.0	104		
Civil matter	15.9	8.5	24.4	79	17.5	9.3	26.7	54		
Crime-person	13.3	7.1	20.4	45	12.7	9.1	21.7	44		
Crime-property	16.9	10.0	26.9	178	15.7	10.8	26.5	117		
Custody/warrant	17.6	5.9	23.5	7	4.8	10.2	15.1	16		
Disturbance	11.7	6.8	18.5	376	10.3	7.0	17.4	356		
Drug	8.3	4.7	13.0	8	5.3	5.3	10.6	12		
Follow-up	22.6	13.6	36.2	42	18.4	12.9	31.4	31		
Investigation	14.3	8.4	22.7	124	11.0	7.8	18.8	91		
Miscellaneous	19.6	12.4	31.9	59	15.7	12.5	28.2	55		
Suspicious incident	12.2	7.0	19.2	181	12.6	7.2	19.8	157		
Traffic enforcement	8.8	6.4	15.2	59	7.8	6.6	14.4	70		
Total Average	12.6	7.8	20.5	1,621	11.6	8.2	19.8	1,542		

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

- In winter, the average response time for most categories was between 8 minutes and 25 minutes.
- In winter, the average response time was as short as 8 minutes (for alarms) and as long as 28 minutes (for general noncriminal calls).
- In summer, the average response time for most categories was between 10 minutes and 27 minutes.
- In summer, the average response time was as short as 10 minutes (for alarms) and as long as 27 minutes (for general noncriminal calls).
- The average response time for crimes was 26 minutes in winter and 25 minutes in summer.

TABLE 7-17: 90th Percentiles for Response Time Components, by Category

Catagoni	Minu	tes in \	Winter	Minutes in Summer			
Category	Dispatch	Travel	Response	Dispatch	Travel	Response	
Accident	13.7	18.1	35.6	10.1	9.1	20.6	
Alarm	5.7	7.7	12.6	5.0	11.0	15.0	
Animal	46.2	17.8	53.8	53.9	19.9	67.9	
Assist other agency	16.0	12.6	31.3	18.0	17.8	42.8	
Check	25.0	13.9	36.9	32.1	16.7	50.8	
Citizen assist	33.7	19.1	48.9	31.5	22.8	46.9	
Civil matter	44.2	17.2	53.8	43.2	18.9	53.9	
Crime-person	34.6	15.7	39.2	31.5	25.0	46.1	
Crime-property	45.5	24.6	64.6	44.1	23.6	52.6	
Custody/warrant	44.7	7.7	51.2	7.3	21.1	29.2	
Disturbance	29.9	13.9	44.2	26.5	14.1	41.7	
Drug	17.5	9.9	25.0	10.1	8.0	18.0	
Follow-up	80.4	31.8	87.1	50.7	36.6	60.1	
Investigation	32.9	17.1	47.8	30.6	14.6	40.3	
Miscellaneous	52.3	27.8	70.9	40.3	32.1	71.1	
Suspicious incident	31.6	13.4	46.8	28.9	14.9	45.8	
Traffic enforcement	18.0	11.5	25.7	18.0	12.9	26.5	
Total	32.5	17.3	48.1	30.8	17.3	46.6	

Note: A 90th percentile value of 48.1 minutes means that 90 percent of all calls are responded to in fewer than 48.1 minutes. For this reason, the columns for dispatch processing and travel time may not be equal to the total response

- In winter, the 90th percentile value for response time was as short as 13 minutes (for alarms) and as long as 62 minutes (for crimes).
- In summer, the 90th percentile value for response time was as short as 15 minutes (for alarms) and as long as 60 minutes (for general noncriminal calls).

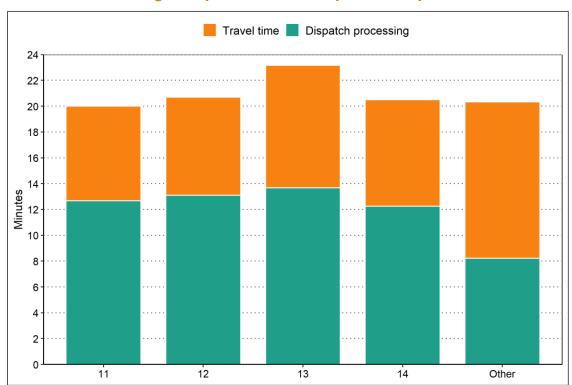


FIGURE 7-30: Average Response Time Components, by Beat

Note: The other category included calls missing beat information and a few calls within the following beats: ELM, OOC, and TOLL.

TABLE 7-18: Average Response Time Components, by Beat

Do ork		Minute	es	Calla	Area (Sa Ailea)	Population (2020)	
Beat	Dispatch	Travel	Response	Calls	Area (3q. miles)	Population (2020)	
11	12.7	7.3	20.0	3,828	1.3	11,034	
12	13.1	7.6	20.7	3,346	1.3	10,964	
13	13.7	9.5	23.2	1,865	2.0	8,010	
14	12.3	8.2	20.5	1,561	5.3	5,100	
Miscellaneous	9.0	12.3	21.2	56	NA	NA	
Unknown	7.7	12.0	19.7	75	NA	NA	
Total	12.9	8.0	20.8	10,731	9.9	35,108	

- Excluding calls in the other category, beat 14 had the shortest dispatch processing time, at about 12 minutes.
- Excluding calls in the other category, beat 11 had the shortest response time, at about 20 minutes.

High-priority Calls

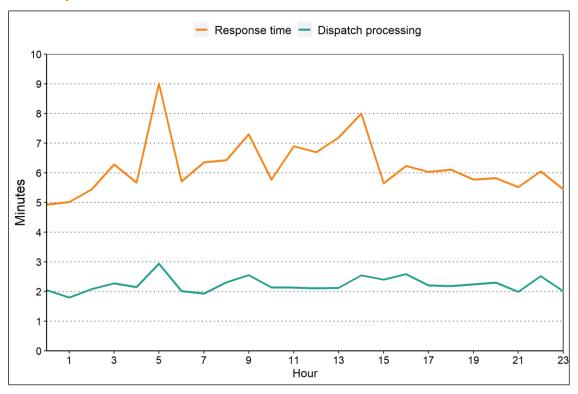
The department assigned priorities to calls with "1" as the highest priority. Table 7-19 shows average response times by priority. Also, we identified the majority of injury accidents based upon their call descriptions, "Accident-PI," to see if these provided an alternate measure for emergency calls.

TABLE 7-19: Average and 90th Percentile Response Times, by Priority

Dui a vida c		Minute	s	Calla	Ooth Baraantila
Priority	Dispatch	Travel	Response	Calls	90th Percentile
1	2.2	3.8	6.1	631	9.6
2	4.2	5.1	9.3	2,262	14.5
3	13.0	8.3	21.3	2,770	47.0
4	17.9	9.5	27.4	4,997	59.7
7	22.3	18.4	40.7	71	78.8
Total	12.9	8.0	20.8	10,731	49.0
Injury accident	2.6	3.8	6.4	73	11.3

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

FIGURE 7-31: Average Response and Dispatch Processing Times for High-priority Calls, by Hour



- High-priority calls had an average response time of 6.1 minutes, lower than the overall average of 20.8 minutes for all calls.
- Average dispatch processing was 2.2 minutes for high-priority calls, compared to 12.9 minutes overall.
- For high-priority calls, the longest response times were between 5:00 a.m. and 6:00 a.m. at an average of 9.0 minutes.
- For high-priority calls, the shortest response times were between midnight and 1:00 a.m. at an average of 4.9 minutes.

APPENDIX A: CALL TYPE CLASSIFICATION

Call descriptions for the department's calls for service from January 1, 2021, to December 31, 2021, were classified into the following categories.

TABLE 7-20: Call Type, by Category

Call Type Description	Table Category	Figure Category	
Alarm	A.I.		
Panic Alarm	Alarm	Alarm	
Agency Assist			
Overdose	Assist other agency	Assist	
Water Call Out			
Welfare Check	Check	Check	
Civil Matter			
Custodial Inter	Civil matter	Civil matter	
Violate Crt Ord			
Assault			
Assault-Aggrav			
Assault-Domesti			
Assault-Firearm			
Assault-Knife			
Child Abuse			
Endangerment			
Harassment			
Homicide	Crime-person		
Indecent Exposu			
Molestation			
Robbery			
Sex Offense			
Sexual Assault		Crima	
Shooting		Crime	
Stabbing			
Threatening			
Arson			
Burglary- Comm			
Burglary- Resid			
Burglary- Vehic			
Counterfeit			
Criminal Damage	Crime-property		
Forgery			
Fraud			
Graffiti			
Theft			
Theft-Automobile			

Call Type Description	Table Category	Figure Category		
Theft-ID				
Theft-Motorcycle				
Theft Attempt				
Transport	Constant de la company	Contact to the contact		
Wanted Person	Custody/warrant	Custody/warrant		
Directed Patrol				
Special Detail				
Traffic Control	Directed patrol	Directed patrol		
Traffic Detail	Directed patrol	Directed patrol		
Vacation Watch				
Walking Patrol				
Alcohol Offense				
ATV Disturbance				
Disturbance				
Domestic				
Fight				
Fireworks				
Intoxication				
Juvenile Prob	Diatura ana a	Diaturb and a		
Neighbor Dispute	Disturbance	Disturbance		
Noise				
Prowler				
Shots Fired				
Trespassing				
Unwanted Guest				
Vagrancy				
Weapon Offense				
Drugs	Drug	Drug		
Animal- Injured				
Animal- Loose				
Animal-Bite				
Animal Cruelty	Animal			
Animal Deceased	Animai			
Animal Pickup				
Animal Problem		Conoral nonoriminal		
Animal Welfare		General noncriminal		
Citizen Assist	Citizen assist			
Follow Up	Follow-up			
905				
Code Enforce	Miscollancous			
Community Ed	Miscellaneous			
Court Appearance				

Call Type Description	Table Category	Figure Category
Court Papers		
Curfew		
Information		
Mental Hlth PU		
Obstruct Justic		
Parking Problem		
PR Contact		
PW Call Out		
Sex Off Reg		
911 Hang Up		
Abandoned Vehic		
Attempt-Locate		
Death Investign		
Felony Flight		
Found Adult		
Found Child		
Found Property		
Found Runaway		
K-9 Call Out		
Lost Property	Investigation	Investigation
Missing Child		investigation
Missing Person		
Recovered Prop		
Recovered Veh		
Resisting		
Runaway Juvnile		
Search Warrant		
Suicide		
Suicide Attempt		
Unknown Trouble		
Unsecure Premis		
Susp Per/Veh		
Suspicious Act	Suspicious incident	Suspicious incident
Suspicious Per		
Suspicious Veh		
Accident- Fatal		
Accident- PD		
Accident- PI	Accident	
Accident- PP		Traffic
Accident-HitRun		
DUI	Traffic enforcement	
Motorist Assist	name emoreement	

Call Type Description	Table Category	Figure Category
Reckless Driver		
Speeding Vehicle		
Traffic Hazard		
Traffic Offense		
Traffic Stop		
VIN Inspection		

APPENDIX B: UNIFORM CRIME REPORT INFORMATION

This section presents information obtained from Uniform Crime Reports (UCR) collected by the Federal Bureau of Investigation (FBI). The tables and figures include the most recent information that is publicly available at the national level. This includes crime reports for 2011 through 2020, along with clearance rates for 2019 and 2020. Crime rates are expressed as incidents per 100,000 population.

TABLE 7-21: Reported Crime Rates in 2019 and 2020, by City

			2019				2020	0		
Municipality S	State	Dam Jakan	Crime Rates			Domulation	Crime Rates			
		Population	Violent	Property	Total	Population	Violent	Property	Total	
Apache Junction	ΑZ	42,531	226	1,763	1,989	43,385	214	1,775	1,989	
Casa Grande	ΑZ	58,366	469	2,289	2,758	59,822	565	2,006	2,571	
Maricopa	ΑZ	50,881	167	1,187	1,354	53,165	126	1,157	1,283	
Oro Valley	ΑZ	45,970	48	1,279	1,327	46,634	58	1,199	1,257	
Payson	ΑZ	15,760	374	1,827	2,202	15,869	630	2,092	2,722	
Prescott	ΑZ	43,781	489	1,562	2,051	44,835	375	1,465	1,840	
El Mirage	ΑZ	36,185	232	2,714	2,946	36,221	293	2,217	2,510	
Arizona		7,278,717	455	2,441	2,896	7,359,580	485	2,228	2,713	
National	•	328,239,523	379	2,010	2,489	331,449,281	399	1,958	2,357	

FIGURE 7-32: Reported El Mirage Violent and Property Crime Rates, by Year



FIGURE 7-33: Reported City and State Crime Rates, by Year

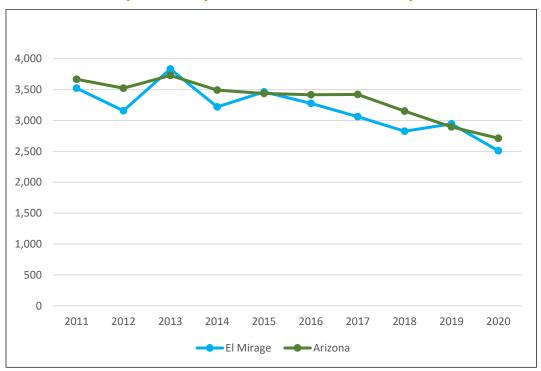


TABLE 7-22: Reported El Mirage, Arizona, and National Crime Rates, by Year

V		El Mir	age			Arizo	na		National			
Year	Population	Violent	Property	Total	Population	Violent	Property	Total	Population	Violent	Property	Total
2011	32,247	295	3,228	3,523	6,501,532	411	3,257	3,668	317,186,963	376	2,800	3,176
2012	32,685	263	2,894	3,157	6,572,455	422	3,102	3,523	319,697,368	377	2,758	3,135
2013	32,837	262	3,572	3,834	6,646,289	398	3,331	3,729	321,947,240	362	2,627	2,989
2014	33,307	171	3,047	3,219	6,751,280	383	3,108	3,491	324,699,246	357	2,464	2,821
2015	33,985	238	3,225	3,463	6,848,298	437	3,000	3,437	327,455,769	368	2,376	2,744
2016	34,376	215	3,060	3,276	6,951,468	458	2,959	3,417	329,308,297	383	2,353	2,736
2017	35,611	239	2,822	3,061	7,016,270	508	2,915	3,423	325,719,178	383	2,362	2,745
2018	35,733	215	2,611	2,826	7,171,646	475	2,677	3,152	327,167,434	369	2,200	2,568
2019	36,185	232	2,714	2,946	7,278,717	455	2,441	2,896	328,239,523	379	2,010	2,489
2020	36,221	293	2,217	2,510	7,359,580	485	2,228	2,713	331,449,281	399	1,958	2,357

TABLE 7-23: Reported El Mirage, Arizona, and National Crime Clearance Rates, 2019

Crime	El Mirage				Arizona		National			
Cline	Crimes	Clearances	Rate	Crimes	Clearances	Rate	Crimes	Clearances*	Rate	
Murder Manslaughter	2	1	50%	375	228	61%	14,325	8,796	61%	
Rape	22	1	5%	3,455	534	15%	124,817	41,065	33%	
Robbery	14	3	21%	6,213	1,715	28%	239,643	73,091	31%	
Aggravated Assault	46	15	33%	21,049	10,242	49%	726,778	380,105	52%	
Burglary	362	25	7%	26,765	2,976	11%	981,264	138,358	14%	
Larceny	523	147	28%	122,918	23,388	19%	4,533,178	834,105	18%	
Vehicle Theft	97	7	7%	17,037	2,115	12%	655,778	90,497	14%	

TABLE 7-24: Reported El Mirage, Arizona, and National Crime Clearance Rates, 2020

Crimo a	El Mirage				Arizona		National			
Crime	Crimes	Clearances	Rate	Crimes	Clearances	Rate	Crimes	Clearances*	Rate	
Murder Manslaughter	4	2	50%	432	292	69%	18,109	9,851	54%	
Rape	25	5	20%	2,838	371	13%	110,095	33,689	31%	
Robbery	11	3	27%	5,739	1,511	26%	209,643	60,377	29%	
Aggravated Assault	66	43	65%	19,751	8,112	41%	799,678	371,051	46%	
Burglary	131	14	11%	21,390	2,744	13%	898,176	125,745	14%	
Larceny	579	162	28%	111,631	19,281	17%	4,004,124	604,623	15%	
Vehicle Theft	4	2	50%	15,806	2,074	13%	727,045	89,427	12%	

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

END