DATALYTICS

Assessment of Oakland Police Department Calls for Service

March 2021

Prepared for:

Introduction

This assessment uses Calls for Service to provide a high-level overview of public safety service demand from the Oakland Police Department in 2019. Calls for Service is a way of gauging public safety interactions with a community with reasonable accuracy. This process allows community members, law enforcement, and civic leadership to better understand how law enforcement generally spends its time. This assessment is not a staffing study and does not purport to evaluate law enforcement staffing needs for specific tasks. Rather this analysis is designed to help identify event types that entities other than law enforcement may be best suited to handle for most events.

This assessment was compiled using Calls for Service data from the Oakland Police Department covering January through December 2019. This dataset encompassed 442,841 Calls for Service which were broken down into 7 overarching categories and 51 separate subcategories for further analysis. There are 497 calls (0.1% of all Calls for Service) that did not have a category. These calls were excluded from analysis.

Oakland Police Department's Calls for Service are measured in terms of unique incidents – where somebody dials 911 for a traffic accident or to report a missing person, for example.

Calls for Service analyses frequently evaluate the amount of time spent by law enforcement on specific call types. This is done by comparing the time of each incident's dispatch to that incident's time of closure. Oakland's Calls for Service included 5,507 calls where the amount of time spent exceeded 12 hours including 2,647 calls with more than 24 hours spent.

It is highly unlikely, for example, that a collision report for a traffic accident took 32 straight hours of officer time. Only 1% of all Calls for Service had longer than 12 hours time spent but they constituted 57.5% of total hours spent. These incidents are almost certainly inaccurate rendering time spent an unreliable measure. An analysis of time spent, therefore, was not conducted for this analysis..

Table 1 - Calls for Service by Estimated Time Spent, 2019

	Calls for Service	Percent of Calls for Service	Hours Spent	Percent of Hours Spent
Calls < 12 hours	436,837	98.8%	305,408.9	42.5%
Calls ≥12 hours	5,507	1.2%	413,676.6	57.5%
Total (All Calls)	442,344	100.0%	719,085.5	100.0%

This analysis provides information on the total number of Calls for Service in each category. This should approximate the amount of time spent on each category though it some types of calls – like a murder – are expected to take more of officer time than more mundane incidents like burglar alarms.

The seven categories of Calls for Service used in this analysis are:

Medical – Calls for Service for medical needs such as mental health, deaths, and ambulance requests.

Miscellaneous Policing – Calls for Service related to policing activities such as administrative activities or 911 hang ups.

Property Crime – Property crimes as defined by the National Incident Based Response System (NIBRS). Includes theft, auto theft, burglary, and arson.

Service – Calls for Service in response to community needs such as runaway children or responding to burglar alarms.

Society – Crimes against society as defined by NIBRS which do not injure a person and obtaining property is not the object. These include drug and alcohol offenses, gambling, and disturbances.

Traffic – Calls for Service involving traffic accidents, direction, and enforcement.

Violent Crime – Violent crimes as defined by NIBRS as criminal homicide, rape, robbery, and assault (both aggravated and simple).

Analysis

Overview

The most common category of Calls for Service in 2019 were miscellaneous policing incidents. These include administrative activities, responding to unfounded incidents, and performing security checks. Crimes against society – such as trespassing incidents or handling disturbances – and service calls – such as responding to alarms or suspicious persons – each accounted for about 15% of all incidents. Calls for Service for traffic-related events made up an additional 13% of calls while property crime Calls for Service made up about 7% of incidents.

The violent crime category made up 4.2% of all calls and included both aggravated and simple assaults to match the National Incident Based Response System (NIBRS) definition. Using only aggravated assaults for violent crimes, as done in the Uniform Crime Report Part I definition, would mean violent crimes make up just 1.6% of all calls.

Table 2 - Calls for Service by Category, 2019

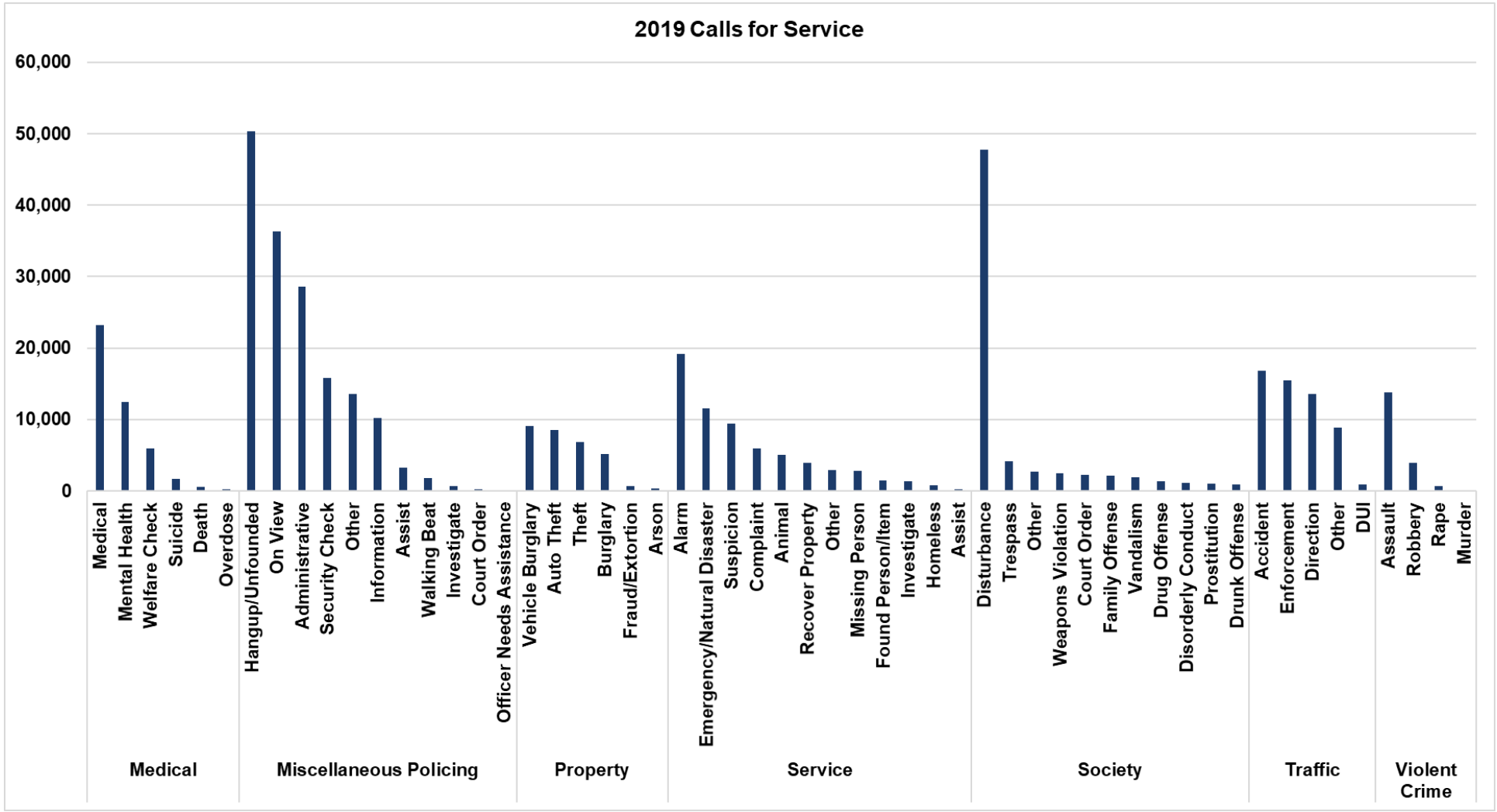
Category	Calls for Service
Medical	44,231
Miscellaneous Policing	160,922
Property	30,750
Service	64,543
Society	67,851
Traffic	55,608
Violent Crime	18,439

Table 3 - Calls for Service by Category and Subcategory, 2019

Category	Calls for Service	Percent of Total Calls	Estimated Median Time Spent (Hours)
Medical	44,231	10.0%	0:41:44
Death	616	0.1%	2:27:40
Medical	23,509	5.7%	0:38:13
Mental Health	12,480	2.8%	0:41:51
Suicide	1,668	0.4%	1:02:47
Welfare Check	5,958	1.4%	0:32:36
Miscellaneous Policing	160,922	36.3%	0:33:57
Administrative	28,564	6.5%	0:42:28
Assist	3,230	0.7%	0:34:52
Court Order	205	0.1%	0:12:23
Hang-up/Unfounded	50,398	11.4%	0:17:31
Information	10,255	2.3%	0:00:40
Investigate	711	0.2%	1:03:37
Officer Needs Assistance	15	0.0%	6:57:01
On View	36,388	8.2%	0:39:09
Other	13,574	3.1%	1:06:34
Security Check	15,790	3.6%	0:29:43
Walking Beat	1,792	0.4%	1:04:48

Property	30,750	6.9%	0:49:07
Arson	323	0.1%	1:05:38
Auto Theft	8,529	1.9%	1:03:25
Burglary	5,212	1.2%	0:47:18
Fraud/Extortion	720	0.2%	0:30:57
Theft	6,893	1.6%	0:37:45
Vehicle Burglary	9,073	2.1%	0:38:26
Service	64,543	14.6%	0:31:21
Alarm	19,150	4.3%	0:22:29
Animal	5,029	1.1%	0:27:04
Assist	194	0.0%	2:48:19
Complaint	5,920	1.3%	0:27:16
Emergency/Natural Disaster	11,523	2.6%	0:32:22
Found Person/Item	1,480	0.3%	0:39:02
Homeless	774	0.2%	0:23:31
Investigate	1,320	0.3%	0:43:10
Missing Person	2,867	0.7%	1:21:07
Other	2,982	0.7%	0:56:16
Recover Property	3,900	0.9%	1:07:11
Suspicion	9,404	2.1%	0:28:49
Society	67,851	15.3%	0:30:45
Court Order	2,217	0.5%	0:45:12
Disorderly Conduct	1,134	0.3%	0:21:13
Disturbance	47,734	10.8%	0:29:05
Drug Offense	1,397	0.3%	0:21:27
Drunk Offense	965	0.2%	0:27:34
Family Offense	2,133	0.5%	1:11:03
Other	2,678	0.6%	0:33:30
Prostitution	1,076	0.2%	0:16:54
Trespass	4,112	0.9%	0:29:22
Vandalism	1,917	0.4%	0:35:33
Weapons Violation	2,488	0.6%	0:56:22
Traffic	55,608	12.6%	0:35:11
Accident	16,800	3.8%	1:03:16
Direction	13,557	3.1%	0:33:09
DUI	921	0.2%	0:30:07
Enforcement	15,461	3.5%	0:23:41
Other	8,869	2.0%	0:33:10
Violent Crime	18,439	4.2%	1:16:27
Assault	13,825	3.1%	1:05:52
Assault (Aggravated)	11,313	2.6%	1:31:43
Assault (Simple)	2,512	0.6%	0:49:43
Murder	21	0.0%	52:19:34
Rape	644	0.2%	2:43:07
Robbery	3,949	0.9%	1:51:45

Figure 1 - Total Calls by Category and Subcategory, 2019



Deep Dives

AH Datalytics identified several Calls for Service types that may be appropriate for resource reallocation discussions. The below table shows incident types that fit three metrics: over 500 Calls for Service in 2019, over 70% of incidents were Priority 3 (defined as “cold reports and situations where there is no threat of danger to life or property”), and fewer than 5% of all incidents resulted in a report being written.

Further analysis would be needed to determine the circumstances for these incidents and whether alternative responses would be appropriate. In addition, Oakland’s Calls for Service does not reliably indicate whether an arrest was made, so a future research direction might involve determining incident types which take up substantial amounts of time but rarely – if ever – lead to arrests.

Table 3 - Frequently Less Urgent Calls for Service Types

Description	Category	Subcategory	Calls for Service	% Priority 3	% w/Report
Animal-Straying	Service	Animal	1,335	97.6%	0.0%
Ambulance Requested	Medical	Ambulance	22,435	99.9%	0.0%
Auto Improperly Park	Traffic	Direction	509	91.4%	0.2%
Auto In Restriced Zone	Traffic	Direction	780	94.4%	0.3%
Vehicle Parked On Sidewalk	Traffic	Direction	679	96.5%	0.6%
Auto Blocking Driveway	Traffic	Direction	6,869	96.8%	1.2%
Vehicle Collision/Property Damage	Traffic	Accident	6,611	70.6%	2.3%
Tow Requested	Traffic	Other	2,139	97.6%	4.5%
Check Vehicle	Traffic	Enforcement	2,718	93.3%	4.8%

Burglar Alarms is another subcategory of calls worth further examination with a high percentage of calls typically stemming from repeat addresses. A review of Calls for Service in New Orleans, for example, found that 44% of burglar alarm incidents came from addresses with more than 3 burglar alarm calls in a given year. The available data did not provide exact addresses, so an assessment of repeat addresses in Oakland was not possible, but a similar discrepancy likely exists with high volume addresses.

Oakland uses a wide array of dispositions to describe what officers found on the scene of an incident including 48 disposition types used for alarm Calls for Service. Over half of all alarm

incidents were given an Alarm – General False Alarm or Alarm – Cancelled disposition while 65% of such incidents could be considered false alarms because they were identified as such, they were cancelled, or determined to be unfounded or gone on arrival.

Table 4 - Most Common Alarm Calls for Service Dispositions, 2019

Name	% of Total	Incidents
Alarm - General False Alarm	31.4%	6,188
Alarm - Cancelled	20.9%	4,106
Report Taken - Assignment Report	18.8%	3,691
Cover	8.2%	1,612
Canceled	7.8%	1,528
Abated	2.5%	494
Duplicate	1.4%	267
Alarm No Response	1.2%	244
Referred to Other Agency	1.1%	215
Unable to Locate	1.1%	210
All Other Dispositions	5.7%	1,124

Recommendations

Oakland PD should consider the following recommendations to improve its Calls for Service data collection, management, and analysis.

Accurate Time Spent: The CAD data contained 5,507 calls with a duration of over 12 hours. These durations were likely errors and rendered a time spent analysis unreliable, as was explained in the methodology section. OPD should investigate the source of this error and implement the remedial measures necessary to minimize it in the future.

Fixed Addresses: The addresses in the dataset provided appear to be at a block level rather than the actual addresses of the incidents. Actual addresses could reveal repeat addresses which may benefit from interventions outside of law enforcement. OPD likely has this data stored in their CAD.

Murder: The Oakland Police Department reported 75 murders to the FBI in 2019 but just 21 Calls for Service had a ‘Murder’ code. Clearly denoting which incidents are murders, even if the incident is not initially a murder on the scene, would be useful for better understanding how officers spend their time.

About AH Datalytics

AH Datalytics is a consulting firm focused on bringing 21st Century analytics to the criminal justice system. Our work helps organizations better understand their problems and figure out if their solutions are working. We bring a wealth of expertise in analyzing, disseminating, and presenting information to organizational leadership and helping organizations effectively convey their analytics to the public.

AH Datalytics has extensive experience with providing comprehensive and data driven analyses to support criminal justice agencies, provide complex data reporting to agency leadership and an interested public, and build sustainable analytic capacity within organizations. Prior to forming AH Datalytics, co-founders Ben Horwitz and Jeff Asher greatly enhanced the use of data analytics at the New Orleans Police Department leading to national recognition and becoming a model agency in the use of data for police reform.

AH Datalytics is currently working with the City of Ferguson, Missouri to support the analytic components of their Consent Decree implementation. Working as subject matter consultants with the DOJ, IACP, and National Police Foundation, AH Datalytics has consulted with numerous agencies including in Spokane (WA), Baltimore (MD), Arlington (TX), Newark (NJ), and Tucson (AZ). Their work has been featured in the NYTimes most recently in the piece entitled, "How do the Police Actually Spend Their Time" and previously, "The Missing Numbers in Preventing Murders."

Prior to AH Datalytics, Mr. Horwitz created the first audit unit at NOPD and then went on to create a nationally recognized Analytics Unit resulting in the development of NOPD's MAX program. The MAX program features a robust and comprehensive dynamic reporting platform to facilitate Consent Decree reporting, close and effective supervision, and crime analysis. Prior to working at NOPD, Ben was the Data and Operations Manager at the Data Center in New Orleans in which he created methodologies, authored analyses, and disseminated economic, demographic, and other data sets to the public. Ben holds an MS in Public Policy and Management from Carnegie Mellon University with a focus on data analysis and information systems.

Mr. Asher initiated the role of public safety consultant for the New Orleans City Council providing data driven analyses to help the Council and public understand criminal justice issues. The resulting dashboards greatly enhanced the public's access to data on crime, consent decree issues, and more. Before launching AH Datalytics, Jeff served as a crime analyst for the City of New Orleans and Jefferson Parish Sheriff's Office, and prior to that he worked as an analyst for the Central Intelligence Agency and Department of Defense. Jeff's analyses have appeared nationally on data journalism website FiveThirtyEight, The New York Times, Slate, and more. Jeff holds a MA from George Washington University.