DRAFT
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Dissertation Chapter on Methodology & Field Site Selection

"It's like an onion. You're peeling back another layer."
-The Sheriff's response to my research proposal on examining bias in the 911 system

This study's methods evolved over time to meet a set of shifting research questions. What

began as a purely quantitative project to measure spatial variation in the amount and type of

police work that stems from calls to 911 by citizens, transformed into a predominately qualitative

endeavor to describe the inner-workings of a massively understudied space in the criminal justice

system – the 911 dispatch center.

The decision to study dispatch was motivated by events in the news and gaps in the

criminal justice literature. A series of high-profile police incidents from the spring of 2018

involved calls to 911 by citizens. Calls to the police – like the one from a white woman who

reported two Native American brothers for their "odd" clothing on a campus tour in Colorado,

from a Philadelphia Starbucks employee who reported two black men for not making a purchase,

and from an Oakland Hills resident who reported a black firefighter for being on his property

during a routine fire inspection – raise questions both about the ways in which citizens use the

police and the tools 911 operators use to process requests. Prior scholarship in sociology,

however, has little to say about the broader context in which police act. While studies

consistently focus on police officer discretion and the immediate features of police-citizen

interactions, like if the officer had probable cause to stop a subject or how the officer treated a

subject, they overlook the initial stages of police mobilization.

Examining the work that goes on *before* police arrive on-scene requires redirecting

attention to the places where calls for police services are received and processed. As I explicate

in Chapter 1, interactions between callers and 911 operators at dispatch centers have serious consequences for when, where, and why police officers are mobilized. To grapple with the role of 911 operators in the criminal justice system, I studied one 911 dispatch center in Southeast Michigan using participant observation. Below I discuss three main factors that shaped my decision to employ ethnographic methods in this study while embedding myself inside the organization as a part-time 911 phone operator. One, the limitations of analyzing administrative 911 data to answer questions about process and meaning-making. Two, historic wariness of law enforcement agencies toward outside researchers. Three, my own positionality as an upper-class, white female with little previous on-the-ground experience with the criminal justice system.

Data Access

My research interest in 911 was first sparked by the high-profile 2014 shooting of an unarmed black teenager, Michael Brown, by a white police officer, Darren Wilson, in Ferguson, Missouri. Like many others, I scoured the news searching for explanations for why Brown was killed by police. The media's reporting on police brutality and the legacy of racial tension between the police and black community in Ferguson provided some answers. My demography training provided more. An event that appeared to be the workings of one bad cop, seemed less idiosyncratic given the demographic shifts happening in places like Ferguson – white, middle-class suburbs becoming less white and poorer, and the institutions that serve residents in these places not keeping pace with the demographic changes.[1] These explanations squared with the extensive sociological literature on police's targeting of people and communities of color. Yet,

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[1] The Ferguson Police Department patrols a predominately black community, yet only four of the department's 53 officers are black.

for me, one piece of this high-profile incident did not fit into the existing narrative as neatly – the police officer was responding to a call to 911.

The altercation between the officer and Brown was initiated by a 911 call made from the convenience store where he allegedly stole cigarillos and pushed the store clerk. A DOJ report that came out eight months after the shooting clarified that the 911 caller was the adult daughter of the Indian store clerk who did not speak English well. [2] Prior to this incident, I had not given 911 much thought beyond it being a life-saving service to activate police, medical, and fire in emergencies. Yet, the call from the convenience store, coupled with the very public national conversation about racial bias in policing, triggered a series of questions for me about the role of the 911 system in law enforcement. Was this another example of over-zealous policing or was it the result of a series of events in a complex system starting with a 911 call? How many other times did police interact with the public because of a call to 911? And, why was there so little research on how 911 was connected to policing? The more I thought about these questions, the more I started to wonder if the answers to them might explain why policy reforms aimed at reducing police officer conscious and unconscious bias had been insufficient at reducing tensions between police and the community.

Four months later another high-profile case of police misconduct surfaced in Cleveland, Ohio that highlighted the importance of another aspect of the 911 system – the role of the dispatcher. Twelve-year-old Tamir Rice was shot and killed by Officer Timothy Loehmann in a local park. A critical element in the shooting was the way a call to 911 by a bystander was handled by the dispatcher. The bystander called to report a black male brandishing a gun in the

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[2] https://www.justice.gov/sites/default/files/opa/press-releases/attachments/2015/03/04/doj_report_on_shooting_of_michael_brown_1.pdf

park. During the call, the caller backtracked on the initial report saying it was "probably a juvenile" and the gun was "probably fake" (Schuessler, 2017). The dispatcher, however, failed to relay the crucial updates to the responding officer. Later the court would put the dispatcher on an eight-day suspension and the officer on a two-day suspension.

Features of these two high profile cases, along with a series of racially-motivated calls to 911 reporting people of color who "didn't belong" in various public spaces, did not fully align with the image of policing in the U.S. as portrayed by most sociological research. Research on inequality, urban studies, and crime largely presents police as independent actors who used their own discretion and bias to target people of color. Academic discussions of policing tend to focus on certain aspects of police-citizen encounters – such as whether the officer had probable cause to stop the subject, if the officer treated the subject with respect, and how the officer's implicit biases shaped the encounter -- in analyzing how police discretion contributes to the growth of the carceral state. Although this focus on police-citizen encounters has led to valuable insights into how police exhibit racial bias in deciding whom to stop (Blumstein, 2001; Harris, 1999; Epp et al., 2014; Gelman et al., 2007) and where to focus their patrol efforts (Rios, 2011; Goffman, 2009; Alexander, 2010), it failed to account for the larger organizational context within which police operate. In the case of Michael Brown and Tamir Rice, it appeared that factors beyond individual officer bias – such as the call to 911 and the information given by the 911 operator – played a pivotal role in each incident.

Academics and policymakers, however, were at the risk of overlooking a critically important step in the process that generates police-citizen encounters – the interactions between citizens and 911 dispatch centers – where professional call-takers field calls from citizens, make decisions about whether requests demand police attention, and provide valuable information to

dispatchers. These interactions are not only important, but frequent. In 2011, an estimated 62.9 million US residents, or about 26 percent of the population, had one or more contacts with the police. Fifty-one percent of those contacts were because a *person requested police services* (Eith & Durose, 2011). Requests come from citizens who are not trained in the legal subtleties of criminal law, have their own biases about people and places, and maintain complex relationships with neighbors, family members, and exes.

Nor are requests limited to the big cities where most existing research on policing is based. Calls to 911 are prevalent in suburban and rural areas where geography is more sprawling and police departments have fewer resources than cities. A 2017 National Academy of Sciences report on proactive policing (i.e., officer-initiated stops) documents that the "use of proactive strategies declines as the size of police departments decline" (pp. 28-29). Existing sites of police study in sociological and criminological literature such as Chicago, Boston, New York, Philadelphia, and Oakland (Rios 2011, Alexander 2011, Goffman 2014, Gelman et al 2007, Fagan et al 2009, Voigt et al 2017, Reiss 1992) are less fruitful spaces for investigating call-driven policing. Because of this, I proposed conducting research in a county in Southeast Michigan that is a mix of villages, townships, and small cities. The field site would provide a window into mid-sized law enforcement agencies where reactive policing is especially prevalent. Little research on the criminal justice system explores the diverse practices at the county level (Pfaff, 2017), despite the largest segment of the geographic U.S. being patrolled by over 3,000 county level sheriff agencies (Falcone & Wells, 1995).

Armed with these facts, I proposed analyzing 911 call-for-service data in X County, Michigan to my advisors under the notion that administrative data – with information like the address of 911 calls, the types of incident, and the number of police cars dispatched –

alone could address my research questions about how calls translate into excessive, unjustified, and racially disparate police-citizen contacts. As a second-year graduate student, I had worked as a research assistant on a survey project about quality of life issues in Detroit with the Commissioner of the Michigan Suburban Alliance who was interested in my budding research ideas about the 9-1-1 system. He put me in touch with the X County Public Defender who coordinated a meeting with the local Sheriff for me to propose my research project. During the meeting, the Sheriff substantiated my hypothesis that residents use the police to enforce social order in discriminatory ways and said that I was "peeling back another layer" in explaining police-resident tensions by focusing on 911. At the end of the fifteen-minute meeting, the Sheriff told me to contact the county's data analyst and Director of Community Outreach to move forward with the project.

With the approval of the Sheriff, I received Excel files with over 300,000 911 calls-for-service from the county's data analyst for 2015 and 2016. The data were a record of every call to the 911 dispatch center that had resulted in a police officer being dispatched to an incident. The datasets included information such as type of incident, location, and time. These data have several advantages. First, like other big administrative datasets – such as education records, medical records, and tax records – they capture human behavior (Connelly et al. 2016). Unlike interview and survey data that often conflate attitudes with actions (Jerolmack & Khan 2014), behavioral data capture what people do, not what they *say* they do. Rather than interview or survey residents about whether they have or would call the police in various situations, call logs would definitively show when and why calls were made and minimize social desirability bias.[3]

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[3] Social desirability bias is defined as the pervasive tendency of individuals to present themselves in the most favorable manner relative to prevailing social norms and mores (King & Bruner 2002).

One prominent criminologist, Andrew Papachristos, advocates for greater use of 911 data in research by explaining that 911 reports are less biased than crime reports because they are captured in real-time. Second, call data allows for making wide-scale systematic assessments of patterns in when and why citizens mobilize the police. Studies using 311 data of calls by citizens for public services such as snow plows or noise complaints discuss the benefits of a large archive of calls that can analyzed across space and time (O'Brien 2016; Legewie 2014).

Despite the benefits of using large administrative data, they do not come without their challenges. 911 call-for-service data are not collected for the purposes of research, have no code book that defines variables or values, and are not well-positioned to answer research questions about process or meaning-making. Looking through the data, I had many questions. Did the call-for-service data capture every single call to 911? Were traffic stops by police included in the call-for-service data? What did jargon like "AB" and "FA" stand for in the incident type field? (Later I would learn "AB" means "assault and battery" and "FA" means "felonious assault." However, FA can include anything from shooting a person with a gun to striking a person with live turtles taken from a local lake). While the answers to these questions could be found by asking for clarification from the organization, I faced a deeper dilemma. These data in isolation did little to address my research question about *how* 911 operators process calls-for-service. For instance, the data could not shed light on why operators categorized the caller's requests the way they did, when operators rejected calls for police services, or the rules operators followed to process calls.

To answer some of these questions, a November morning I met with the director of Central Dispatch. I walked onto the floor of the call center and was surprised by the scene playing out in front of me. Never had I seen so many computer screens in one room. There were

twelve cubicle style work stations at the center, each with five to eight computer screens stacked horizontally and vertically over the desks, manned by men and women in full sheriff's uniforms wearing headsets. The director walked me over to an unmanned station and answered many of my data questions. I tried to listen and take note, but was distracted by the number of interactions playing out in the room. Callers were interacting with call-takers on the phone, call-takers were interacting with dispatchers on the floor, and dispatchers were interacting with the police on the radio. To an outsider, the cacophony of ring tones, police voices playing out over speakers, and call-takers repeating words like "ma'am" and "sir" sounded chaotic. Through the chaos, I saw clearly that this was the place where citizen requests were being turned into police responses.

As I walked out of the center, the director mentioned that the organization was hiring part-time call-takers and asked me to tell students on campus looking for work. I half-jokingly told him that I might be interested in the position. On the elevator ride down, I started to seriously consider the offer and wondered if I would be allowed to pursue such work since it would be paid and might "slow my time to graduation" – a perpetual fear of my funding administrator. But the advantages seemed huge. I would hear firsthand what callers and call-takers said on the phone. Furthermore, I would experience the decision-making process that 911 operators go through to make sense of caller's requests for police services and see how these decisions shape police responses. Embedding myself in the organization as a part-time 911 operator required a different method of data collection – participation observation.

Participation observation is a form of qualitative data collection that is particularly effective at answering *how* questions through detailed descriptions. Specifically, participant observation is well-suited to address research questions that ask about how a process works, that interrogate taken-for-granted understandings, and that adjudicate between talk and action

(Liebow, 1967; Becker, 1996: 61; Thacher, 2018). Unlike interview data that can suffer from social desirability bias, may be misinterpreted by the "outsider" researcher, and typically does not capture the behaviors of the subject, participant observation allows for observing the actions of individuals in relation to others (Jerolmack & Kahn, 2014). Moreover, participant observation can capture moments before and after an event, and how multiple actors interpret and make sense of that event (Becker & Greer, 1957). Becker and Greer, like their symbolic interactionist fore-fathers, George Herbert Mead and Herbert Blumer, argue that meaning is collectively negotiated through interaction. It is this emphasis on interaction that makes participation observation well-suited for this study. Observing call-takers as they make sense of callers' demands in an environment filled with interactions between callers, dispatchers, and police presents the researcher with the most complete data to examine the inner-workings of dispatch.

Participant observers vary in how much they participate at their field site. In this study, I opted for a high degree of participation in part because of the insular nature of law enforcement agency. I was guided by the work of sociologist Peter Moskos who joined the Baltimore City Police Department to conduct his dissertation research on policing and drug arrests. With ethnography, he told an insider's story of what policing was like on-the-ground. In his dissertation, he recounts the barriers he faced to researching the department without joining the force. After attending police training as an observer, police leadership told him he could only conduct his research if he "successfully completed the hiring process…[and became] a fully active and paid member of the recruit class" (2008 dissertation). The response of the department is not surprising given law enforcement's historical wariness of researchers (Rubinstein 1973; Friedman, 1992; Bouza, 1990). Maurice Punch (1979), who conducted an ethnography of police in Amsterdam, wrote about the need for participant observation: "The researcher's task becomes,

then, how to outwit the institutional obstacle-course to gain entry and … penetrate the mine-field of social defenses to reach the inner reality of police work. Prolonged participant observation seems to me to be the most appropriate, if not the sole, method for achieving these ends"[4] While my study is about 911 and not the police, 911 dispatch centers fall under control of local law enforcement and are organizationally and culturally similar in many ways to the police.

Working at 911 was also influenced by own positionality as an upper-class white female with no prior real-world experience with the criminal justice system. What I knew about policing was the product of reading books and articles that largely focused on the ways in which police targeted people of color. I worried that my perceptions of the dispatch center would be biased by my views of policing more broadly. By embedding myself in the organization, I aimed for greater objectivity. Getting hired for this job was largely a reflection of my skin color, socioeconomic status, and education level. The hiring process is intensive. It includes two computer exams that test typing ability, oral communication skills, verbal ability, reasoning ability, memory ability, and perceptual ability, a lengthy written job application, two in-person interviews (one with a 911 simulation where the interviewee has to handle a practice call), an in-person two-hour background investigation by detectives, an eight-hour psychiatric evaluation, a drug test, a hearing test, and an unpaid eight-hour observation of a 9-1-1 call-taker. The hiring process took four months. For candidates who do not have stable employment while transitioning jobs, four months is a lengthy period to be unemployed. Moreover, candidates with felony convictions are ineligible to apply.

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[4] I first encountered this quotation by Maurice Punch in Peter Moskos' 2008 dissertation.

Field Site

Central Dispatch is located on the second-floor of a non-descript brick building in X, Michigan. There are no signs on the door, no businesses listed in Google Maps for the address, nor any mention of the location on local police websites. If a member of the public were to look through the glass entry door on the first floor, all they would see is an empty brick-lined room with a few old mops and janitor buckets laying around.

The lack of transparency about the location of Central Dispatch is not merely an accident, rather it is a method of defense. On at least ten occasions, five different staff members said that they feel vulnerable to attack from disgruntled residents looking to retaliate against law enforcement. Since staff are not authorized to carry firearms onto the floor of the center, and the center is not located in a police department where armed law enforcement officials are present, employees rely on the anonymity of the center to feel safe. Staff intentionally do not wear their Sheriff's Office uniforms on the street, and many carry concealed firearms for protection even though they are required to keep them in lockers outside the entrance of the center.

Despite the seemingly plain facade, the inside of Central Dispatch is a hectic hub of communication. From the constant ringing of phone lines to the overlapping sounds of multiple conversations between 911 operators and callers to the police talking over the radio, the dispatch center is rife with interactions. While many dispatch centers share these features, Central Dispatch is a particularly fruitful field site for this study for three main reasons: the dispatch center dispatches for multiple police agencies, it covers a geographic area with considerable racial and socioeconomic variation, and it is one of Michigan's busiest dispatch. Therefore, there is substantial heterogeneity in the demographics of the callers, the types of requests the center receives, and the ways in which police agencies respond. While my field site provides a window

into reactive policing, this sample is of course not representative. The findings presented in this dissertation should be evaluated as constituting a theoretical framework which can then be tested among other law enforcement agencies, not as an attempt to generalize back to all law enforcement agencies broadly.

Central Dispatch is a Public Safety Answering Point (PSAP) run by the X County Sheriff's Office that handles requests from nearly all 348,560 citizens in X County, Michigan. Dispatch operations were merged with the City of Y in 2009, the City of Z in 2012, and U Township in 2018. As a consolidated PSAP, Central Dispatch operates as an organizational unit under the control of the X County Sheriff's Office while dispatching for six distinct police agencies across 22 cities, townships, and villages. The City of Z and the City of Y are patrolled by their own distinct police departments, while the X County Sheriff's Office and the Michigan State Police patrol most of the surrounding townships and villages.

Geographically, much of X County is rural, has low population density (fewer than 3,600 people per square mile), and is white (percent white is eighty-five or higher). The City of Z and the City of Y are more densely populated with an average population density of 4,140 and 4,540 people per square mile, respectively. These two cities, and closely surrounding townships, are racially distinct from one another. African Americans make up 7 percent of the population in Z, compared to 32 percent of the population in the City of Y and 27 percent in Y township. In Y, the African American population is highly concentrated with some areas over 70 percent Black. The two areas also vary in unemployment, poverty, and median income. The average unemployment rate in Z is 3 percent, compared to 7 percent in the City of Y and 5 percent in the surrounding township. The average poverty rate is considerably higher in the City of Y (41%)

and Y Township (17%) than in Z (14%). Similarly, average median household income is much lower in the City of Y ($26,097) and the surrounding township ($55,335) than in Z ($75,925).[5]

Based on personnel, call volume, size of population covered, and number of agencies served, Central Dispatch is one of the busiest dispatch centers in Michigan. On average, the center receives approximately 1,300 calls per day and dispatches police out to slightly over 500 of those calls. Calls that receive a police dispatch are referred to as calls-for-service.[6] Calls-for-service are unevenly distributed across the three shifts at the center – "days" 7 am – 3 pm, "noons" 3 pm – 11 pm, and "mids" 11 pm – 7 am – with the "noons" shift receiving the highest volume of calls-for-service. Figure X illustrates the frequency of calls-for-service by time of day. Calls-for-service are also unevenly distributed across day of week and month of year, with Fridays and summer months being among the busiest times. Figures X and Y display the frequency of calls-for-service at Central Dispatch by day of week and month of year.

Inside Central Dispatch, 911 operators dressed in department issued uniforms of tucked-in khaki colored button-up shirts with embroidered Sheriff's Office badges and name tags, black braided belts with large silver buckles, and black tactical cargo pants process citizen requests. Depending on the time of day, anywhere from four to eight operators are working together at one time, with two operators designated to dispatch police over the radio, one operator designated to enter, run, and cancel warrants from the court in the Law Enforcement Information Network, and the remaining operators answering phones.

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[5] *Ibid*.
[6] The center only dispatches police, though it does answer and transfer calls for fire and medical services to the Huron Valley Ambulance (HVA) dispatch center.

As of Spring 2018, Central Dispatch was operating with 21 trained full-time operators and 6 trained part-time operators, which is below recommended staffing levels.[7] Working under minimal staffing conditions was a consistent feature of my tenure at Central Dispatch. Low staffing levels made for challenging working conditions with some full-time operators being forced to work 16-hour shifts multiple days in a row. While my co-workers often blamed the lack of hiring on failures in recruiting by the supervisor, data from the agency indicate that the issue is less about recruiting and more about attrition during the hiring process. In 2016, the agency received 292 applications for full-time communication operators and 219 applications for part-time call-takers. Requirements for applying to the job are relatively low – you must be over the age of 18 and have a high school diploma or GED – and entry level salary for full-time operators is decent – $36,713 annually, with top pay being $58,631 annually. Moreover, full-time operators are unionized meaning they have benefits, pensions, and the ability to work overtime for 1.5 and 2.0 times pay. Part-time call-takers are paid approximately $18/hour with no benefits or union status. Despite the number of applicants attracted in the position, none of the 292 full-time applicants, and only four of the 219 part-time applicants, were hired in 2016.

A major reason for the lack of job offers is the lengthy and involved hiring process. The hiring process for 911 operators at Central Dispatch involves nine tasks: passing a data entry test, attending a presentation describing the job, completing a 31-page personal history statement application (9-page for part-timers), observing a 911 operator for an eight-hour shift, passing the CritiCall computer test, human resources interview, background investigation, medical examination, drug test, and psychiatric examination. Completing this process took me approximately four-months and was at times quite intense – like when I was interrogated for two

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[7] Full-staffing is considered 30 full-time operators.

hours by in-house detectives who sat with a 3" binder with the name "Gillooly" on the side and grilled me about whether I had engaged in drug activity as a student on "liberal" college campuses, if I had ever joined a group with the intent of overthrowing the US government, and why the police had issued a warning to me when I was 16 years old and driving a 10' boat in my hometown in Rhode Island. Additionally, as part of the hiring process I sat through an eight-hour psychiatric examination – complete with multiple choice personality tests, an IQ test, and an interview with a psychologist – in an office park outside Detroit. Human resources data from the agency reveal that the highest drop-off in applications comes early on. Of the 292 full-time applications, only 78 signed up to take the initial data entry test. Of the 56 who passed, 43 attended the job description presentation, 18 completed the 31-page personal history statement, 10 passed CritiCall, and 2 passed the human resources interview and subsequent background investigation. This process took twelve months, countless human resources hours, and netted one job offer which the candidate did not accept.

In response to requests for immediate solutions to hiring shortages from full-time staff to management, the agency began streamlining the hiring process in January 2017. The agency has since eliminated the County's pre-employment data entry test since similar skills are tested during the CritiCall computer test and the county test is only offered one day of the week making it difficult for applicants with busy schedules. Furthermore, applicants who do not pass Criticall on their first attempt can now retake the test in 30 days, and the agency has bought additional licenses for the software so applicants can practice the test on-site. Additionally, greater recruitment efforts have been made on the following websites – Policeone.com, Officer.com, Go Law Enforcement.com, Policejobsinfo.com, Lawofficer.com, Craigslist, Barefoot student, 911

jobs Facebook page, 911 Emergency Dispatcher Facebook page, Recruit Military Facebook page, Indeed.com, Monster.com, MCOLES – and local college campuses.

Recruitment efforts are targeted at both part- and full-time operators; however, full-timers frequently express frustration with part-time call-takers at Central Dispatch. For one, full-time operators are trained to rotate between all three job positions at Central Dispatch: answering phones, operating the radio, and running the Law Enforcement Information Network (LEIN), whereas part-time operators are only trained to answer phones. To full-timers, this translates into part-time call-takers not understanding the kind of information that police need over the radio and entering inappropriate calls-for-service. One full-time operator suggested that once Central Dispatch reaches full staffing, part-timers should only answer non-emergency lines and leave 911 lines to full-timers. (In later chapters, I will go into further detail about how part-time v. full-time staff handle calls.) Aside from different job descriptions and less training, part-timers can choose their schedule and cannot be forced to work overtime which irritates full-time staff. See Figure X for an illustration of the floor lay-out inside Central Dispatch with job positions and descriptions.

Demographically, the staff at Central Dispatch are largely homogenous. The X County Sheriff's Office 2017 annual report finds that compared to other divisions – community engagement, administration, corrections, and police services – emergency services (i.e., Central Dispatch) is the least diverse with 96 percent of staff being white and 60 percent of staff being female (see figures X and Y in the appendix). In response to the 2017 report, the two biracial women who work at Central Dispatch joked aloud that they "are the four percent" of diversity in the department. Most of the younger employees (under age 45) have college degrees, many of which are in criminal justice, while the older employees have high school or associates degrees.

More than half of the full-timers joined Central Dispatch either straight from college or from other local dispatch agencies that were taken over by Central Dispatch. They are deeply invested in staying in dispatch until retirement and frequently discuss the number of years remaining until their pensions will start. Several of the males working in dispatch at one time had an interest in being police officers but either did not pass the necessary exams or opted for the safety of working inside. Paul shared with me that he had thought about being a cop but "the pay isn't that different from working in dispatch and being a cop is hard today with people shooting at you and stuff."

Despite Central Dispatch being in downtown Z, none of the employees live in Z. Instead, they tend to live in more rural areas of the county and frequently deride people from Z as being too liberal and high maintenance. They prefer the freedom and solitude that comes with living in the country, and spend much of their limited free time going hunting, camping, drinking beer, and being with family. Nearly all the 911 operators have been married at one time or another and have children. Those who work the 3 pm - 11 pm shift and have younger children, religiously call home each afternoon to make sure their kids are doing their homework, have let the dogs out, cleaned the house, or gotten ready for bed. In addition to their family at home, many of the staff at Central Dispatch consider their co-workers as a second family given the number of hours they spend together. This closeness between staff is balanced by a level of fractiousness given the demands and stresses of their work.

Data

Field Notes

I was hired in June 2016 as a part-time call-taker at a Central Dispatch in X County, Michigan. After four months of job training (including in-class, on-the-job, and a 40-hour online

course offered nationally), I was qualified to work as a 911 operator. Since then I have worked 21 months and over 1,000 hours answering phone calls, listening to caller's problems, communicating the limits of what police respond to, learning the complex social dynamics between workers at the center, going on police ride-alongs, and attending meetings with management.

Throughout this experience, I have taken field notes of my experiences on the phone and with co-workers. Most of my field notes come from the "noon" shift that runs from 3 pm – 11 pm and is the busiest of the three shifts. Twice a month I worked a 12-hour shift from 3 pm – 3 am. As a part-timer, I had the luxury of choosing my schedule rather than being assigned to a shift. I selected the noon shift because I was exposed to the most calls, didn't have to be up all night, and was told by my trainer that my personality would fit in best with the co-workers on "noons" as they were close to my age and considered more "normal" than the "vampires" who worked midnights. Approximately 40 percent of my field notes come from Friday and Saturday shifts because of needing to juggle my responsibilities as a graduate student with 911. Furthermore, a policy change at the center in January 2017 required part-time staff to sign up for at least 32 hours on Fridays or Saturdays due to staffing shortages during these critical shifts.

During my shifts, I would take a mix of detailed fieldnotes and short jottings to write up when I got home. Some days I was too physically and emotionally exhausted to and did them the next day or not at all. My supervisors were aware that I was taking fieldnotes during work because I submitted a formal research proposal to both them, the undersheriff, and sheriff asking for permission to do so. My co-workers were less aware of my notes, but did know that I was "doing research on 911 at the center" and was earning my PhD. I took notes in paper notebooks and on my laptop. I had multiple sets of notebooks with me at work. Three of them contained

notes with random items that were hard to memorize, but easy to irritate co-workers if forgotten. Items like the after-hours key code for the local animal shelter that the police often forgot and asked for when dropping off stray dogs, the phone number for the IRS tip line for callers who received scam calls, the age cut offs for an incident to be categorized as a runaway or a missing person, and the computer code to change an incident over to the appropriate police agency if accidentally entered incorrectly. I made sure to take field notes about calls and interactions with co-workers in a separate notebook because I did not want co-workers accidentally reading those notes. Having some notebooks filled only with information about how to do the job was also handy when my supervisor asked me one day to look through my notes.

The most detailed fieldnotes came from using my laptop during my shift. Employees can use cell phones, IPads, and laptops during work, though there is a risk of the items being FOIA'ed in response to a screw-up and being disciplined if caught on a device while handling a 911 call. Despite that risk, most employees still have electronic devices out at their desk. Certain work stations offered enough privacy that I could type on my laptop without co-workers noticing what I was doing. The biggest obstacle with taking field notes was the speed at which calls came in. The center receives an average of 1,300 calls per day. Some shifts I handled over 200 calls which works out to about 2.4 calls per minute, leaving little time to write down what happened before having to answer the next call.

Audio Recordings and Call-for-Service Data

For a researcher, a useful feature of studying the 911 system is that every single call is saved on a recorded line. While it was often difficult to capture caller's exact wording or what callers said on the phone to call-takers other than myself, I was partially able to address these data gaps by gathering audio recordings of calls to the center. I collected and redacted personally

identifiable information (e.g., names, phone numbers, exact addresses) from 225 number of recordings. While the study would have benefited from more recordings, the data maintenance system to search through recordings is not user friendly, lacks any identifiers that link recordings to calls entered for service in the CAD computer software system, and requires manual redacting.

The recordings used in this study are to more clearly illustrate the number of decision points a call-taker experiences on the phone before entering a call into the CAD system for the dispatcher to give out to the responding officer. They are also used to measure variation in whether a call was accepted or rejected for police dispatch, and the extent to which a call-taker challenges the caller on what he/she is reporting, by call-takers of varying levels of experience and job status (e.g., part-time v. full-time). To analyze the audio recordings, I draw on a methodology called *conversation analysis*, which was developed by sociologists in the 1960s and has been used to study interactions between 911 callers and call-takers in the past. The method comes out of seminal work of Erving Goffman and Harold Garfinkle. Conversation analysis takes from Goffman the concept that interactional talk is a social domain – much like family, religion, or education – that can be studied as its own institutional entity; and takes from Garfinkle the concept of sense-making where human action can be understood through socially shared meanings and practices (Heritage & Clayman, 2002).

To ensure that my field notes and audio recordings are not a collection of anomalous circumstances that do not reflect general call patterns, I triangulate between these data sources and the call-for-service data. Despite the limitations of big administrative data that I discussed above – they are messy and inconsistent – the call-for-service data provide a complete archive on the type and frequency of police-citizen contact across the county. Call-for-service (CFS) records include all police-citizen contacts that resulted from a call to 9-1-1, a call to a non-emergency

line, or an officer-initiated stop (i.e., traffic stop) that was radioed into dispatch. The data include a unique incident identifier, the date and time the call was received, the reported offense as determined by the call-taker, the verified offense as determined by the officer once on scene, and the block level address of the incident. Officer-initiated traffic stops are flagged in the data to differentiate them from citizen requests for service. However, police-initiated encounters such as suspicious person stops that an officer radios into dispatch are not flagged to differentiate them from other non-emergency telephone calls in the CAD system. Note that there are no records of calls in the CFS data where an officer was not dispatched such as calls where the 911 operator addressed the complaint without police assistance -- helping a lost driver, redirecting a caller to another agency, multiple calls about the same incident.

With the help of the Sheriff's Office data analyst, I exported call-for-service data for four of the five police agencies that Central Dispatch dispatches for. I excluded data from D Township because it accounts for only 2% of all calls-for-service. Using Stata, I appended the call data from the four police agencies into one data file. Below I present the volume of calls by agency and per capita.

Table X: Total Number of Calls-for-Service handled by Central Dispatch for 2015 & 2016 by agency and total population

	Number of Calls-for-Service handled by Central Dispatch	Population (2016)	Number of calls per capita
Z Police Department	118,465	120,782	0.98
X County Sheriff's Office	193,654	122,064	1.59
Y Police Department	34,655	21,028	1.65
Total	346,774	263,874	

Drawing on resources at the Clark geospatial library and the center for Consulting for Statistics, Computing, and Analytics Research (CSCAR) at University of Michigan, calls-for-service were geocoded and merged to block-group census data. Four percent of the call data were dropped because they were missing latitude and longitude and could not be geocoded based on the street address. Census variables come from the 2011-2015 ACS 5-year estimates and include racial composition, education level, and poverty status. These data are discussed in the next chapter where I present maps and descriptive statistics to illustrate the distribution of calls across the various cities and townships in the county.

Gaining Trust

Gaining the trust of my co-workers at Central Dispatch was at times harder than the actual job of answering 9-1-1 emergency phone calls. Staff are largely unwelcoming to newcomers since many quit during training, gossip mercilessly about workers who make

mistakes for anything from not providing information quickly enough for in-progress calls to mixing up "their," "there," and "they're" in the narratives they type in the computer screen, and are not fond of part-timers. Early on in my training, I realized I had a lot to overcome to build relationships with my research participants. I was a part-timer, who lived in Z, was pursuing a PhD, was from the East Coast, and did not carry a gun. Yet, building rapport would be crucial to the quality of data I would collect for my dissertation. In *Rapport,* Karen O'Reilly writes that ethnography, "Involves establishing reciprocal relationships based on mutual trust and understanding, which in turn demands a certain rapport. The kinds of relationship built in the field can affect the quality and range of access achieved (and vice versa) and the data collected, or constructed." To build rapport with my co-workers, I spent the first four months of my job training speaking only to my communications training operator (i.e., a full-timer who works certain shifts as a trainer) and my supervisor. One of the other women who started around the same time as me was overly talkative with our co-workers early on, and I overheard them expressing irritation with her for "not knowing her place at the center." To avoid starting off on the wrong foot, I spent my first six months answering as many calls as I could, not speaking to anyone unless they spoke to me, and quietly observing the unspoken social norms of the center.

Over time, I picked up on social cues about what irritated full-timers – such as staying on the phone too long with a caller, asking for help answering the same question multiple times, acting overly confident, or making spelling and grammar mistakes in the computer screen. I also picked up on the less call-related cues – such as not moving someone's food out of the microwave until they reclaimed it, never going number 2 in the bathroom inside the kitchen area, wiping down your workstation with Lysol wipes after your shift, avoiding the word "quiet" because it would surely bring a deluge of calls, and showing up 20 minutes before your shift to

relieve your co-worker. After about eight months of proving myself an efficient worker who was attuned to the social norms of the center, my co-workers began opening-up to me and vice-versa. With rapport built, I could ask more questions to my co-workers about how they handle calls and push them more on what they saw as a "legitimate" call to the police, much like how Howard Becker unraveled the multiple meanings of the word "crock" in the medical setting through questioning medical students about their definition in different settings (1993).

Despite doing my best to navigate the rules of the center, for most of my first year I was paranoid that the full-time operators did not accept me and I was subsequently not capturing data about their frustrations with the job, their mental thought-processes when deciding how to handle callers, or their biases about callers and locations. A major break-through happened when the full-timers on my shift invited me to sit at the desk position next to the dispatchers' desks. This position is informally reserved for full-timers who are on phone duty, and not open to part-timers. Being able to sit in this position meant not only that I was gaining respect at work, but also that I could better overhear the struggles and frustrations experienced by dispatchers.

Further, a sign of approaching "insider" status was getting teased by co-workers. Jokes about my trips to the Food Co-Op on lunch break where the "barefoot hippies go," my confusion about what a "chop shop" was (I later learned it is *not* somewhere to bring your car for service), or my East Coast palate that "probably only drank Fiji water" were some of the recurring jokes made at my expense. On three occasions, two of my co-workers and one of my supervisors laughed about me "being a mole" because of my research, though that was mostly on days when I went in off-duty to pull audio recordings of calls. Other signs of acceptance included receiving support from full-timers after challenging calls in the form of hugs, being invited to switch into the "good" locker room, and occasional text or Facebook messaging outside of work.

While approaching "insider" status had its perks, it also meant I was developing biases about people and places that I had to confront. Two years later when I left Central Dispatch, my co-workers told me that the job had changed me and I was more jaded toward the public than when I started. Over farewell drinks at a local bar, two of my co-workers reminisced about my initial innocence and how they did not think I would make it through training because they had heard that on one occasion I was nervous to ride the elevator with a cop, and on another, I was scared that a cop was going to shoot a black man who a caller reported as standing on a street corner with a gun. While I never approached their level of distrust and skepticism, I did become hardened to the everyday plight of many callers. My patience for listening to drawn out stories about child custody battles or the reasons why a caller broke up with their girlfriend wore thin faster and often resulted in fist banging at my desk when the caller would not stop talking. With phone lines ringing in the background, I was often faced with a trade-off between efficiency and quality service.

Furthermore, I caught myself stereotyping people and places based on what side of town they called from or the way they spoke on the phone, despite my years of training in graduate school on implicit bias, racism, and social stratification. Many 911 operators rely on stereotypes when handling calls, such as trusting that callers from certain apartment complexes know the difference between hearing gunshots and fireworks more than others. Yet, mental shortcuts like these can backfire. I experienced this one afternoon when I entered a call-for-service to the wrong location. The address the caller gave me exists in both Z (a predominately white city) and Y Township (a heavily African American area). I mistakenly assumed the caller was in Y based on her name, the way she spoke on the phone, and previous calls to that location, and did not realize my error until she called back irritated that the police had not arrived yet. Moments like

this one highlight how my own biases at times had negative consequences for the police and the public.

Lastly, becoming a 911 operator made me complicit in a criminal justice system that I frequently struggled to consider just. While I provided life-saving assistance in some incidences, in others I entered calls-for-service with the main goal being to harass low-income people and people of color, such as when a caller could not articulate why a person was suspicious beyond their mere presence on the street. Additionally, when asking a caller for a subject's name, race, and date of birth – whether that subject was a suspect in an assault or an elderly neighbor who needed to be checked on – I was gathering information used to run people for warrants often unbeknownst to the caller. At times, asking for that information led to arrests.

In sum, gaining acceptance from my research participants and being socialized into the job of a 911 phone operator speaks to some of the ways in which the work going on in dispatch centers complicates the existing narrative that police officer discretion is the root of problems facing the police today. The gate-keepers, who can be deeply mistrustful of callers, rely on stereotypes for mental shortcuts, and rarely deny police services, also exercise discretion and that discretion can have serious implications for excessive, unwanted, and racially disparate policing.

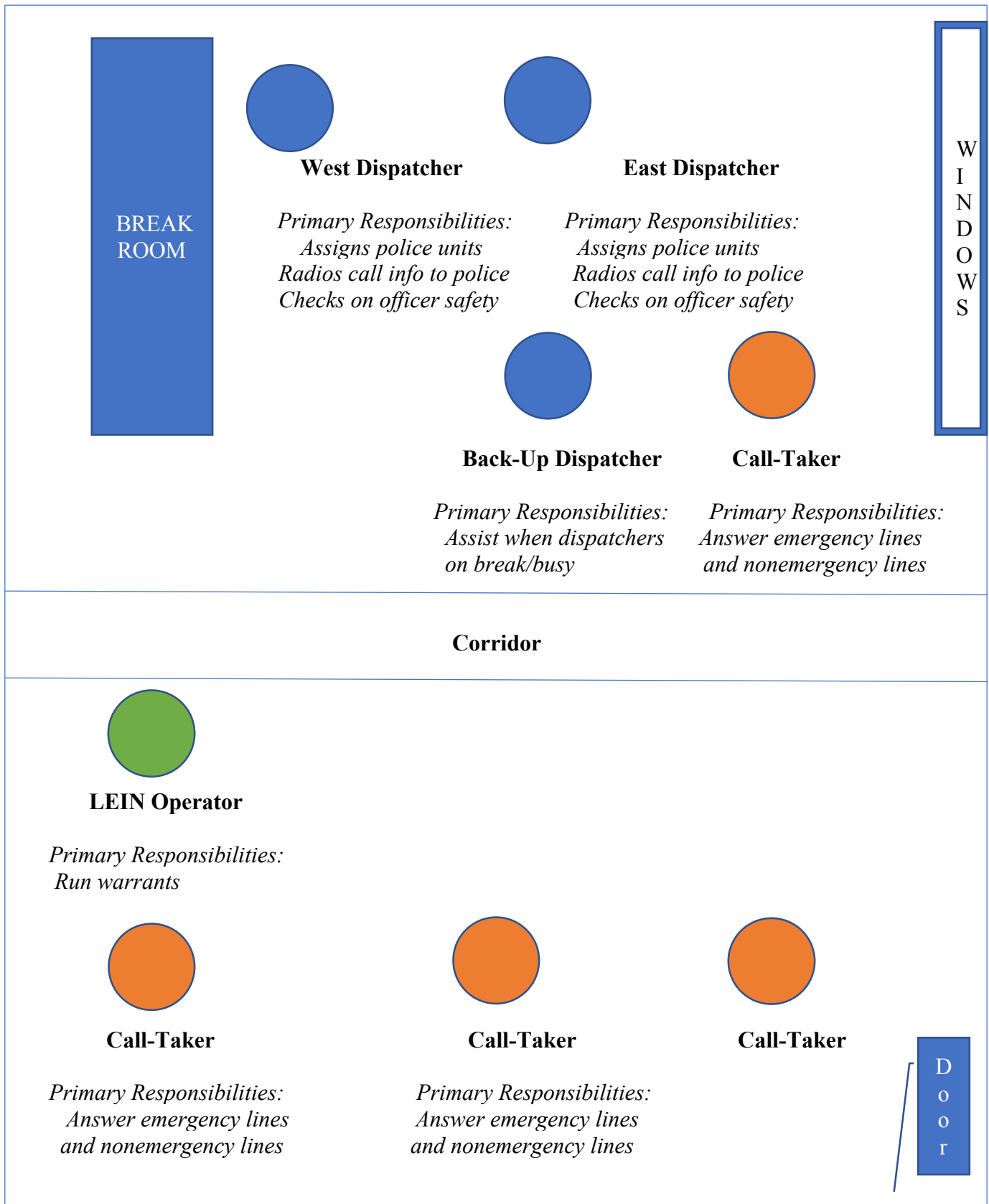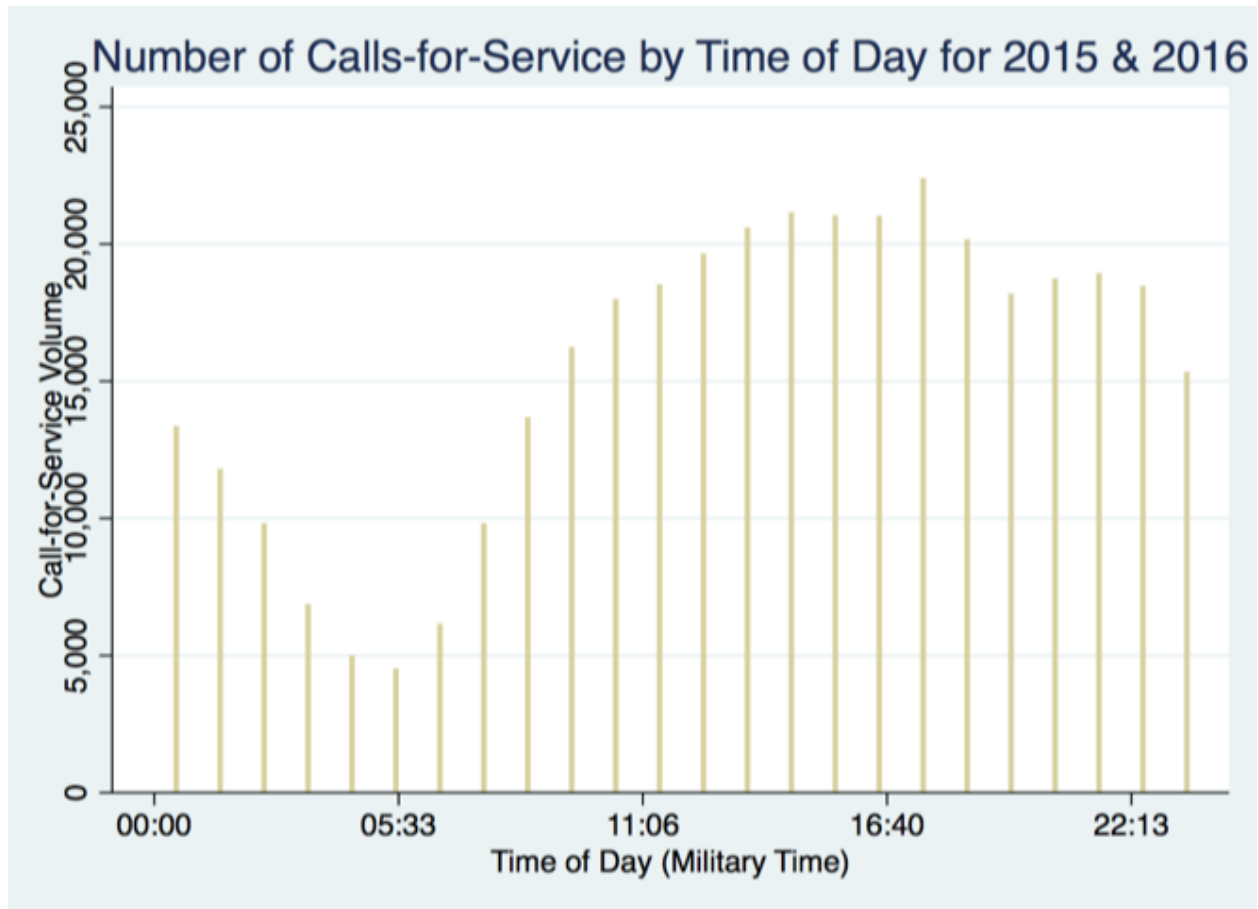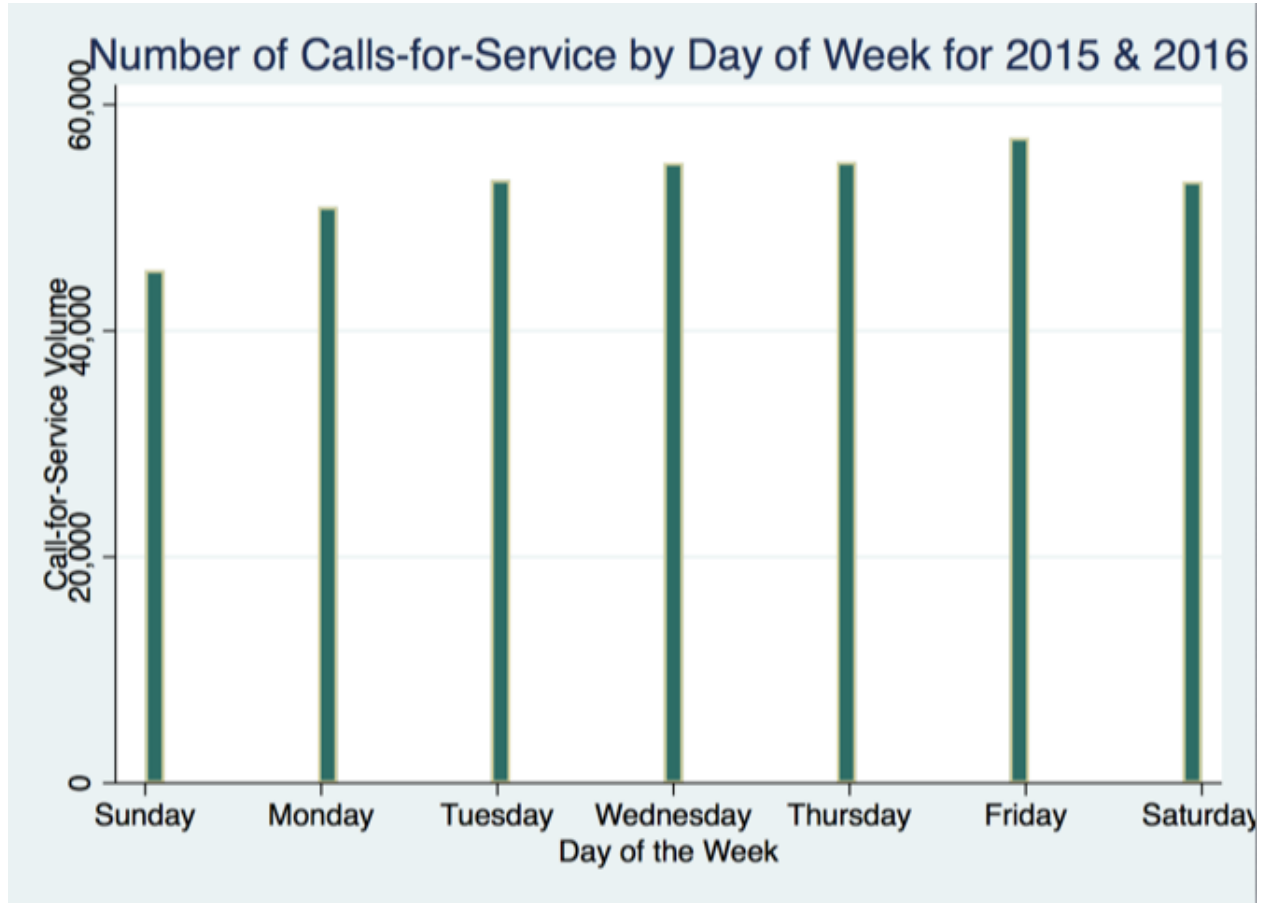*Figure X: Central Dispatch Floor Plan and Positions*

BREAK ROOM

West Dispatcher

Primary Responsibilities:
Assigns police units
Radios call info to police
Checks on officer safety

East Dispatcher

Primary Responsibilities:
Assigns police units
Radios call info to police
Checks on officer safety

WINDOWS

Back-Up Dispatcher

Primary Responsibilities:
Assist when dispatchers
on break/busy

Call-Taker

Primary Responsibilities:
Answer emergency lines
and nonemergency lines

Corridor

LEIN Operator

Primary Responsibilities:
Run warrants

Call-Taker

Primary Responsibilities:
Answer emergency lines
and nonemergency lines

Call-Taker

Primary Responsibilities:
Answer emergency lines
and nonemergency lines

Call-Taker

Door

Figure X:

Source: Call-for-service data from Central Dispatch.

Figure X:

Source: Call-for-service data from Central Dispatch.

Figure X:

Number of Calls-for-Service by Month for 2015 & 2016
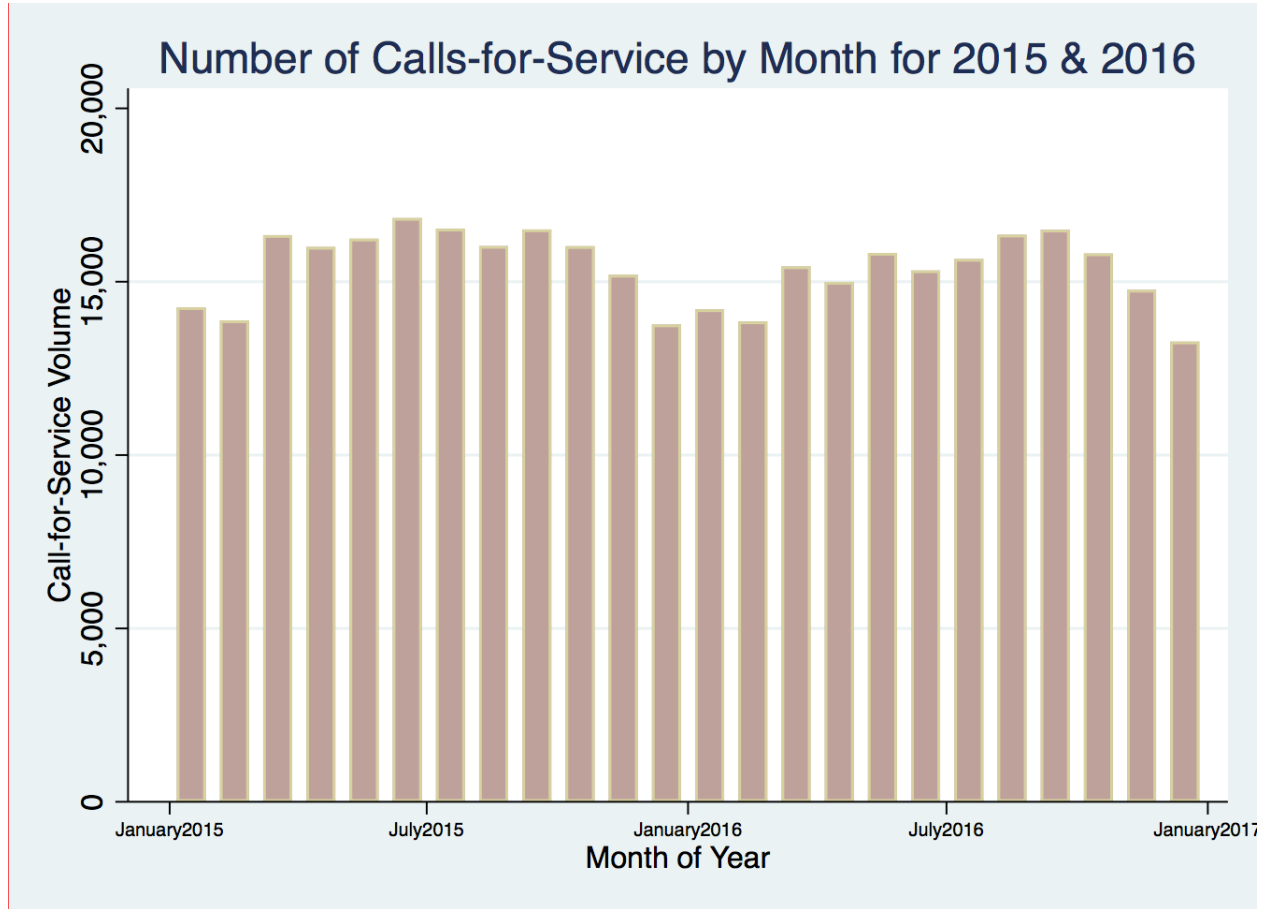
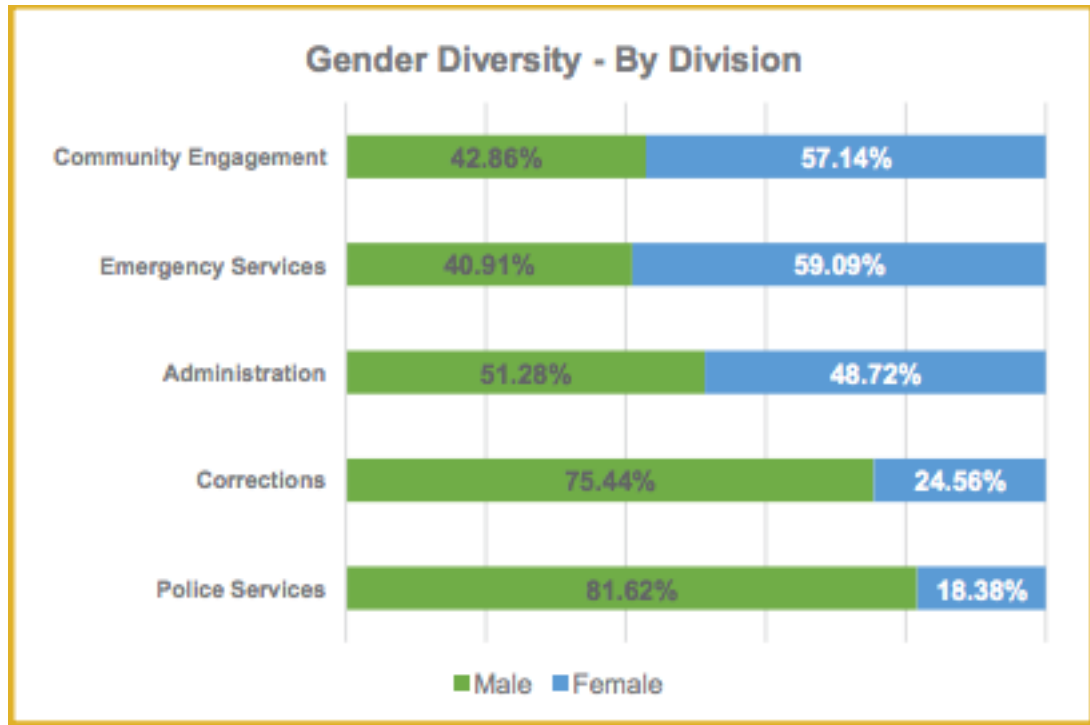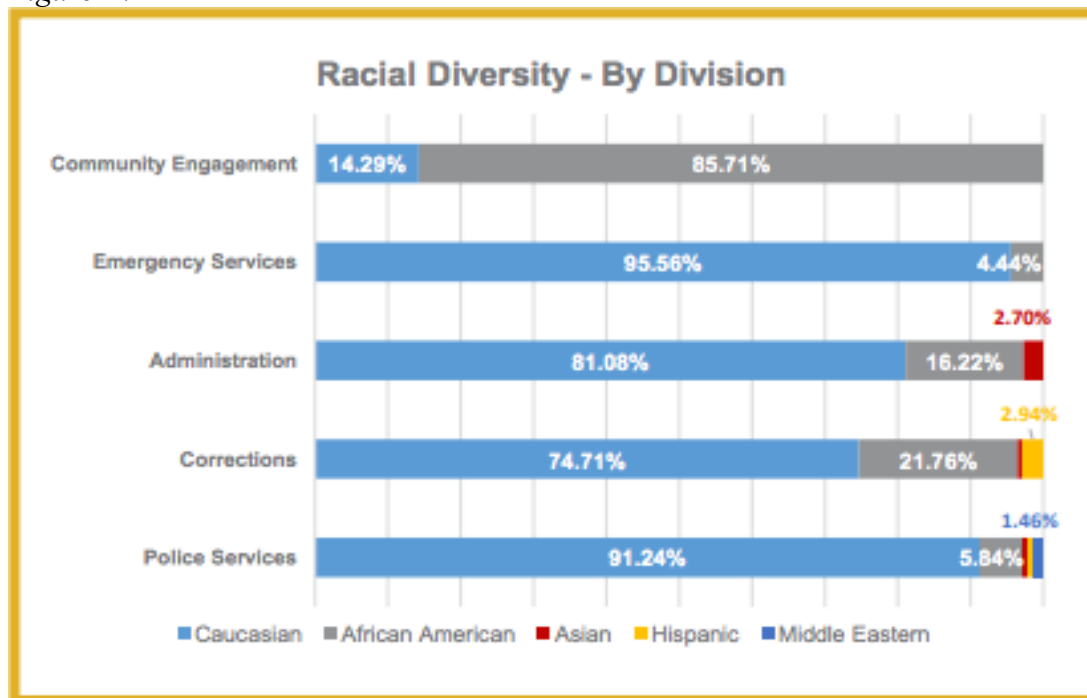Source: Call-for-service data from Central Dispatch.

Figure X:

Figure X:

Source: X Sheriff's Office Annual Report