SHIFTING POLICE FUNCTIONS

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I. Executive Summary

The appropriate role of police in modern society is a matter of public debate, complicated by the diverse set of services that police officers currently provide in the US. While the popular notion of police work is centered around maintaining public order and reducing crime, in reality police spend considerable time performing civic functions that do not involve a crime in progress, such as collecting information on nuisance complaints, responding to automotive incidents, or acting as early responders for individuals in immediate need of social or psychological support.

Increased attention to police violence and other harms of policing has recently led to widespread re-evaluation of the amount of public funding appropriated to police departments and the specific functions that we delegate to armed officers trained in deployment of force. More and more, people are questioning whether services traditionally provided by police should be distributed to other institutions in government or the community, and whether this shift could prevent police killings and reduce uses of force.

Yet little is currently known about how shifting the roles of police or reducing the number of active officers would impact public safety more broadly in U.S. cities. It is unclear to what degree a sizeable police force is in fact a necessary resource for society to respond quickly to violent events when they do occur, and to prevent more violent events from occurring in the first place.

In this report, we provide descriptive analysis of the services that police currently provide in response to public need, examining police functions through the lens of 911 calls for service data in five U.S. cities. We then review the current state of evidence on alternative strategies intended to move certain civic functions away from police. Considerable operational and technical challenges have prevented rigorous evaluation of existing alternatives to the police response model to date. We emphasize that structured evaluation of alternative models for police function is vital for understanding how best to serve the needs of the public while maintaining reducing harm from violence.

II. What Public Functions do Police Currently Provide?

Analysis of 911 calls for service provide a convenient window through which to consider what public services police currently provide in direct response to public need. While 911 calls do not cover all police functions, such as proactive policing efforts or investigating previous incidents, much of the public discussion around shifting the functions of police have focused on alternative strategies for responding to public requests for service in times of emergency.

In this section, we combine findings reported by Khogali et al. (2020) from 911 call systems in multiple U.S. cities with original analysis of calls for service data provided by the Baltimore Police department. We focus attention on five categories of 911 calls that are particularly relevant to discussion around shifting the functions of police. Mental health emergencies and

domestic violence incidents are two categories of calls where alternative models might involve integrating police response with other trained specialists, such as mental health professionals or social workers. Responding to automobile collisions represent one function where a significant proportion of calls for service might be offloaded entirely away from police to civilian responders. Finally, violence and property incidents represent two categories of core police functions that are likely to continue to need police involvement. Consideration of alternative responses therefore relates to specific practices used by police on these calls. These five types of service calls do not capture all 911 categories where alternative response strategies might be considered, but illustrate the wide range of functions that police currently provide.

The composition of 911 calls for service is typically examined by breaking down call volume into calls of various incident types. Table 1 reports 2019 call volume as a percent of all 911 calls for service for the categories listed above, supplementing aggregate statistics reported by Khogali et al. (2020) with additional aggregate data from Baltimore. Neusteter et al. (2020) provide a more detailed breakdown of 911 calls from multiple U.S. cities, applying a variety of qualitative and quantitative analysis methods to understand how calls are currently handled and how response is dispatched.

The number of calls received by 911 systems is an imperfect measurement of how much time and resources actually go into responding to calls of various types, as it does not include information on how many patrol units responded or how much time officers spent responding to a given call. We highlight this concern with statistics on service time spent across call categories from a police department in a large U.S. city (Baltimore, MD) in Table 2, showing that focusing on the distribution of call volume versus service time across categories can lead to different conclusions about how police spend time and resources.

Service time is defined here as time spent responding to a call for all officers on-scene. The statistics reported in Table 2 do not include the time spent by call-takers and dispatchers in receiving and processing calls or dispatching an appropriate response. Service time also does not include time spent conducting follow-up investigations or taking additional reports after the call for service is closed, and likely underestimates the total amount of service time spent on these 911 call categories by officers.

Table 1. Call volume in five U.S. cities for selected categories as percent of community-initiated 911 calls for service.

	Baltimore, MD[1]	Camden County, NJ[2]	Tucson, AZ[2]	New Orleans, LA[2]	Seattle, WA[2]
Mental Health and Behavioral Emergencies	2.1%	2.4%	1.4%	1.6%	2.4%
Domestic Disturbances and Domestic Violence	4.9%	6.6%	6.8%	4.9%	-
Violence	12.6%	1.4%	1.3%	-	-
Property	15.8%	3.3%	7.7%	13.3%	-

Auto Collisions and Accidents	10.1%	3.8%[‡]	4.7%[‡]	8.9%	4.3%

[1] From analysis of 2019 calls for service data provided directly to report authors from the Baltimore Police Department (BPD). The statistics reported here have not been proofed by BPD.
[2] From descriptive analysis of 2017 calls for service data reported by Khogali et al. (2017).
[‡] Combines auto accidents with general traffic-related calls.

Table 2. Comparison of call distribution and service time distribution across select call categories in Baltimore, MD in 2019.[1]

	% of Call Volume	% of 911 Service Time	Officer Hours	FTEs
Mental Health and Behavioral Emergencies	2.1%	2.7%	6,278	3.0
Domestic Disturbances and Domestic Violence	4.9%	6.3%	14,944	7.2
Violence	12.6%	17.5%	41,326	19.9
Property	15.8%	17.9%	42,332	20.4
Auto Collisions and Accidents	10.1%	11.3%	26,748	12.9

[1] From original analysis of 2019 calls for service data provided directly to report authors by the Baltimore Police Department (BPD). The statistics reported here have not been proofed by BPD.

Mental health incidents and behavioral crises have garnered considerable public attention as a type of public health emergency that may be better served by responders with specialized training to avoid bad outcomes for the subject in crisis, such as injury or arrest (Thompson, 2003; Charette, 2014). Public discussion has focused specifically on sending mental health professionals in conjunction with police officers, or not sending armed officers at all.

Analysis of 911 call volume from multiple cities indicates that a small proportion of citizen-generated calls for service fall into this category, based on the final call classifications recorded after the event is closed. Mental health and behavioral emergencies make up between 1.4-2.4% of all calls for service across the five cities included in Table 1. A recent study of calls for service from nine cities of various sizes found similar proportions, with mental/medical calls making up 0.5% to 5.3% of calls for service across the cities included (Lum et al. 2020b).

As shown in Table 2, officers spend 2.7% of all 911 service time responding to mental health calls in Baltimore, or 3.0 full-time equivalents[1] (FTEs). Lum et al. (2020b) found that across the

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[1] For this analysis, we assume 2080 hours of service time is one full-time equivalent.

nine agencies included in their study, 5.5% of officer service time was spent responding to mental/medical calls on average. Estimates of service time provide some insight into the specific capacity that would be needed to address emergency calls for individuals in behavioral crises in cities of different sizes. Even in a moderately large city the size of Baltimore, a relatively small number of full-time positions would be needed to cover the service time that police currently spend responding to these calls.

A critical limitation of this analysis relates to understanding how quickly and effectively early responders can address emergency situations. A small, specialized team of trained clinicians or social workers may or may not be able to respond as quickly to behavioral emergencies happening throughout a city compared with a police department with resources for rapid dispatch to multiple calls happening at once. Descriptive analysis of calls for service, while helpful for understanding the current distribution of police effort, is fundamentally limited in its ability to inform the effectiveness of alternative models for serving public needs.

It is possible that shifting civic functions away from police may also affect their ability to fulfill core police functions. In 2019, police spent 11.3% of their time responding to automobile collisions and crashes in Baltimore, or the equivalent of 12.9 full-time officers. This analysis might suggest that Baltimore could replace around 13 police officers with other civil servants to reduce reliance on armed law enforcers for addressing public needs around vehicle collisions.

What remains unclear is whether the size of the police force should be reduced by a comparable amount, and how reducing police capacity in this way would affect how officers respond to serious violent incidents where response time is critical. Table 2 indicates that in Baltimore, violent incidents occupied 17.5% of total officer service time spent responding to calls for service.[2] Shifting civic functions away from police could improve their ability to address to violent incidents by freeing up additional police time, or alternatively this process could hamper their ability to respond to and prevent violence if total capacity and resources are reduced. Whether moving traditional civic functions away from police provides a net benefit to public safety remains an empirical question that cannot be answered by descriptive analysis alone.

III. Current State of Evidence on Alternatives to Police Response

Localized innovations around the U.S. have begun to expand beyond the traditional model of police response to public calls for assistance. While these alternative response strategies represent promising directions for future research, few are currently supported by a strong base of empirical evidence. For example:

- Crisis Intervention Teams (CIT) represent an emerging solution to handling mental health incidents in policing through dispatch of officers trained in appropriate response to individuals with mental illness. The CIT model offers police officers specialized training by police trainers, local mental health professionals, family advocates, and consumer

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[2] A 2020 New York Times analysis of calls for service in ten U.S. police agencies found that police spend only 4% of their time responding to serious violent crime (Asher and Horwitz, 2020). In Appendix Tables A.1 and A.2, we list the call types included in various categories for our analysis, and we note that different choices around what types of calls should be categorized as violent (e.g., including or excluding simple assaults) can produce very different aggregate statistics.

groups. CIT also supports partnership between psychiatric emergency services and police departments, thus encouraging treatment rather than incarceration. Studies on CIT to-date consist mostly of examination of police surveys (Compton et al., 2014; Reuland et al. 2004) and officer dispatch logs (Teller, 2006) before and after implementation of a CIT program.

- New systems for diverting non-emergency calls for service are increasingly utilized in cities. 211 systems are typically used to route callers to specific human services resources, such as employment programs, veteran services, housing assistance, treatment programs for substance use disorder, or mental health services, while 311 systems allow community members to file complaints with the city related to non-criminal concerns such as noise or sanitation. Mazerolle et al. (2002) examined the potential for non-emergency call systems like 311 to divert calls away from police, finding that police still received high volume of non-emergency calls even when 311 was available to community members, and that calls to 311 still required evaluation for possible police response due to serious crimes reported through the non-emergency line. Lum et al. (2020a) also observed that 42% of calls coming through non-emergency lines led to dispatch of a police officer, indicating that greater adoption of non-emergency phone lines will not fully divert calls away from police response.
- Crisis hotlines are another alternative for community members seeking professional help around mental health emergencies. These programs offer support by providing immediate access to a trained crisis worker who can listen and connect the caller to local resources. Many crisis hotlines offer specialized support for specific type of crisis (e.g., the National Suicide Prevention Lifeline or National Domestic Violence Hotline). Some cities also provide local crisis hotlines connected to local crisis intervention response units, such as the Mobile Crisis Team in Baltimore, MD.[3]

The most rigorous studies to date on improving response to emergency calls for service have centered on refining the call-taking and dispatch components of the 911 system. The National Institute of Justice (NIJ) ran several field tests of differential 911 response systems in the 1980s with the goal of increasing the efficiency of calls-for-service systems and maintaining citizen satisfaction with 911 process (McEwen; 1986). Alternative responses under consideration included:

- telephone reporting
- delayed dispatch of mobile response (30- or 60-minute delay)
- referral to another agency, or
- scheduling an appointment for a later time.

The NIJ field tests included randomization to evaluate alternative responses, with randomization approach varying by field site. At two sites, a single call-taker or shifts of call-takers were randomly selected to administer differential responses to calls for service. Another site automatically alternated which calls would be handled using a traditional system and experimental alternatives.

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[3] See https://bcresponse.org/our-work/mobile-crisis-team.html.

Results from the field tests indicated that access to differential response strategies increased non-patrol responses to calls for service and increased the amount of time available for patrol units to spend on other police activities. One site (Greensboro, NC) reported a 9.1% decrease in non-patrol responses to calls for service when differential response approaches were used. Another site (Garden Grove, CA) reported a 40% increase in the number of field-initiated reports taken by police officers when differential response was available, indicating a substantial increase in police activity unrelated to 911 response.

Survey results indicated high rates of overall satisfaction for citizens in both the control and alternative response groups. Of citizens who were directed to give a telephone report without a mobile response, 94.2% indicated satisfaction with the call-taking process, versus 94.4% of citizens receiving a delayed mobile response and 95.4% of citizens receiving a rapid mobile response. Citizens receiving the rapid mobile response expressed the highest levels of satisfaction more often, however, with 69.8% indicating they were "very satisfied" with services provided, compared with 60.4% of those directed to the telephone reporting unit and 57.1% of those receiving a delayed mobile response.

While the NIJ experiments were aimed at improving the efficiency of existing 911 systems rather than evaluating broad changes in the services police provide to the public, we highlight these field tests as examples of how new systems for responding to public need should be evaluated moving forward. Empirical comparison of traditional approaches to alternative systems, ideally through randomized experiments, is needed in order to fully understand impacts to critical public safety and citizen satisfaction outcomes resulting from a major shift in police functions.

IV. Conclusion

Cities around the U.S. have begun to experiment with alternative approaches to addressing public need for assistance, such as the Mobile Crisis Team in Baltimore, the Crisis Call Diversion program in Tucson, AZ, and the Crisis Assistance Helping out on the Streets (CAHOOTS) program in Eugene, OR. In a study of 911 call-takers and dispatchers in Fairfax County, VA, Lum et al. (2020a) observe that call-takers serve a significant role in determining how calls for service are diverted through their own interpretation and discretion, underscoring the need to integrate any new alternatives with existing systems for call-taking and dispatch. As more localities consider moving services away from police departments and towards other institutions in the government and community, standardization of data collection and structured evaluation will be paramount for identifying optimal strategies for addressing public need and reducing risk of harm from responding to calls for service.

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Appendix A. Call Type Categorization for Analysis of Baltimore Calls for Service Data.

Section II includes original analysis of calls for service data provided by the Baltimore Police Department. In Tables 1 and 2, we have summarized calls using a set of five categories: auto collisions, domestic disturbances and domestic violence, mental health and behavioral emergencies, property calls, and violence calls. Crosswalks from the original call types to these five categories from Baltimore calls for service data are reported in Table A.1.

Table A.1. Call Type Categorization for Analysis of 2019 Baltimore CFS Data

Category	Call Type
Auto Collisions	ACCIDENT-AUTO
	ACCIDENT-PERSON INJ.
	ACCIDENT-AUTO DEATH
	ACCIDENT-DEPT.
	ACC-DEPT-PERS INJ
	ACCIDENT-HIT & RUN
Domestic Disturbances & Violence	FAMILY DISTURBANCE
	EXPARTE/PROT/PEACE
	CHILD ABUSE-PHYSICAL
Mental Health and Behavioral Emergencies	BEHAVIORAL CRISIS
	SUICIDE - ATTEMPT
Property	RECOVERED VEHICLE
	BURGLARY
	INVESTIGATE AUTO
	LARCENY- PERSON CONTACT
	LARCENY- FROM AUTO
	LARCENY- OTHER
	FALSE PRETENSE
	DESTRUCT. OF PROPERTY
	STOLEN VEH./OTHER
	LOST PROPERTY
	RECOVERED PROPERTY
Violence	UNAUTHORIZED USE
	CARJACKING
	RAPE (FORCE)
	OTHER SEX OFFN.
	ROBB BANK (A)
	ROBB MISC (A)
	ROBB MISC (UA)

Category	Call Type
	INVOLUNTARY DETENTION
Violence	AGG ASSAULT - GUN
	AGG ASSAULT - CUT
	AGG ASSAULT - HANDS
	COMMON ASSAULT
	ARMED PERSON
	HANDGUN VIOLATION
	CHILD ABUSE-SEXUAL
	DISCHARGING FIREARM
	SHOTSPOTTER ALERT