

PART 2

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Improving Baltimore Police Relations With the City's Black Community

Alternate response to non-criminal
emergency calls for service



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Executive Summary

The Baltimore Police Department (BPD) faces serious staffing challenges, particularly in its patrol ranks. The demands of the job amid strained police-community relations make recruitment and retention difficult. Under the 2017 Consent Decree between the City of Baltimore and the U.S. Department of Justice, behavioral health calls to 911 that do not necessitate a police response are to be diverted from BPD to a community behavioral health or crisis response service provider. We studied several recent police reforms instituted by other major U.S. cities that aim to reduce role of police in everyday life by transferring some police responsibilities to civilians. Albuquerque, Atlanta, and Houston now divert some categories of 911 calls, such as behavioral problems or suicide attempts, to civilian agencies rather than the police. Stakeholders view these diversion initiatives as successful in all three cities. Police, both as individuals and as departments, are also increasingly supportive of these initiatives. Diverting calls to civilian responders permits police to devote more time to controlling crime. The reduction in the workload placed on police may help to mitigate police staffing challenges.

Using BPD service call data, we identify which categories of 911 calls are very unlikely to be associated with dangerous crime or to require police intervention. Based on three potential program designs, emergency calls could be diverted to civilian first responders at comparable cost to BPD officers. Our baseline estimate indicates that diverting most low risk calls to civilians saves the BPD the equivalent of 59 full-time officers, about 10% of the BPD's present recruitment shortfall. A diversion program also has the potential to improve police efficiency, performance, and relations with the community.

We offer the following observations regarding the expansion of Baltimore's 911 call diversion program:

Expect this initiative to be successful.

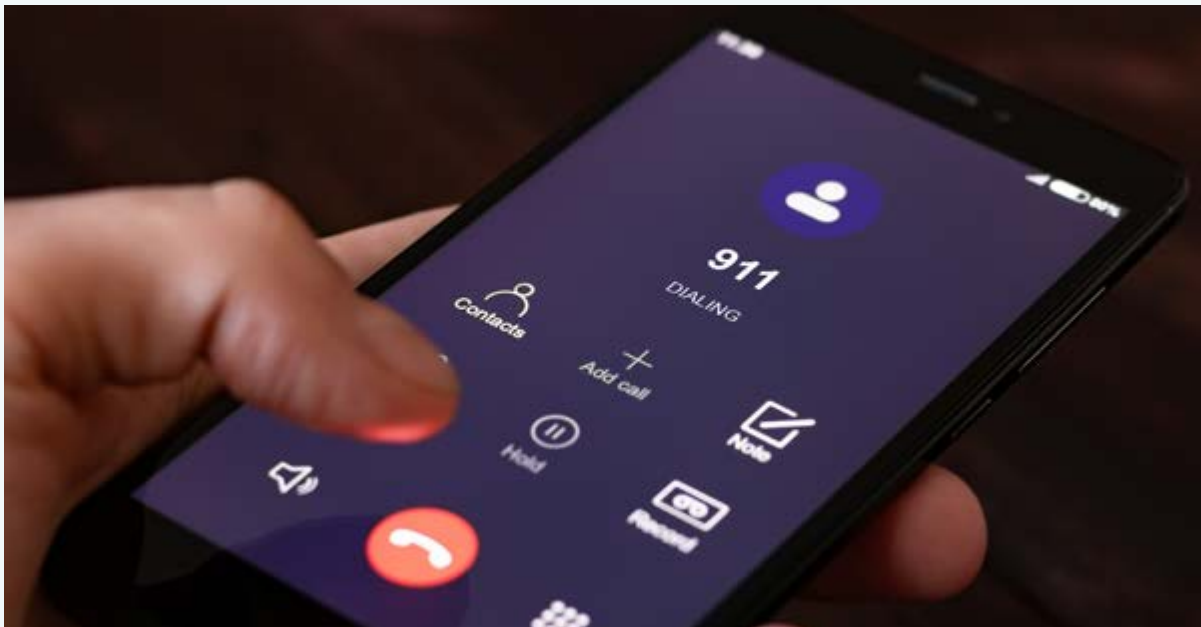
The early years of Baltimore's behavioral health diversion program are for ironing out the kinks and understanding local idiosyncrasies, not testing whether call diversion can work. The experience of other cities provides strong evidence that this kind of innovation can reduce police officer workload and improve 911 call outcomes for behavioral health clients.

Do not anticipate substantial reductions in service call demands or public spending on public safety in the early years of operation at scale in any community. It takes time to learn how to integrate these programs with other emergency services and to recruit appropriate staff.

Take advantage of existing data and analyses to identify categories of calls for service that are unlikely to require response by an armed officer. The analysis presented in this report is a starting point, not a definitive categorization. The BPD has access to additional data, which can be used to develop a more sophisticated scheme for identifying and diverting low-risk calls.

Develop performance metrics that match the goals of the program. The goal of this program is to improve service to citizens, not to save money. However, efficiency still matters because all programs face budget constraints. Assessments of a diversion program's success should reflect this trade-off.

Tailor the program to the city's needs and capabilities. Baltimore should learn from the experiences of other cities, but the types of calls that are diverted and the design of its program should be informed by lessons learned from its operating environment and a pilot program.



Introduction

In most jurisdictions, a significant portion of 911 calls to which police are dispatched do not involve a crime. Many of these non-criminal calls for service involve individuals experiencing acute mental health crises or other emergency personal welfare issues that do not pose significant risk to the community or first responders. If police handle these calls poorly, either through excessive use of force or inappropriate arrest, police-community relations erode and public safety suffers. This concern is central in Baltimore. The 2017 Consent Decree between the City of Baltimore and the U.S. Department of Justice stipulates that behavioral health calls to 911 that do not necessitate a police response should be diverted from the BPD to a community behavioral health or crisis response service provider.

Several U.S. localities now use an alternative response model that dispatches civilians with specific expertise in behavioral health services to 911 calls that meet certain criteria. Early evidence suggests these programs can yield ancillary benefits for the police departments and broader public safety. First, scarce patrol resources could be reallocated toward higher priority needs. Second, fewer arrests should occur in circumstances where police can use coercive force, but civilian responders cannot. These changes may lead to broader improvements in police-community cooperation, a key element of

the community-oriented policing model Baltimore is pursuing.

This second report on police-community relations in Baltimore focuses on a new movement throughout the nation to reduce police contact with residents in stressful, non-criminal situations. This involves using non-police personnel to respond to some categories of 911 calls that do not involve crime and typically relate to behavioral health problems. Based on expert interviews and field observation, we analyze the experiences of Albuquerque, Atlanta, and Houston, three cities that have successfully embraced 911 call diversion. We found that the structure, goals, and performance measures associated with each program varied across each city. All are growing slowly, and none have encountered serious operational problems.

Our study of successful programs instituted by other major U.S. cities helped inform our study of emergency call diversion in Baltimore. Using a detailed dataset of Baltimore 911 calls over the period from 2015 to 2020, we identify which categories of emergency service calls could be diverted to civilian responders. We estimate a fully implemented diversion program could reduce police officer time devoted to emergency call response by the equivalent of approximately 60 officers per year.

For a police department with a chronic officer shortfall, a program to scale could provide an important boost to its capacity to suppress crime through more active investigation and patrol.

The report concludes with a short set of conclusions and recommendations for instituting a call diversion program in Baltimore. More extensive versions of several components of this study are available online.¹



Jessica Gallagher, The Baltimore Banner

Diverting 911 Calls: Learning from Other Cities

Calls for service from individual residents drive a large share of police activity, but less than a quarter of calls are for a crime and only approximately 4-6% involve violent crime (Asher & Horowitz, 2020; Lum, Koper, & Wu, 2022).² Recognizing the widespread concern about unnecessary use of force, many cities have expressed an interest in reducing the role of the police in responding to a variety of call types. The fact that police departments in almost every city have been unable to recruit sufficient officers to meet their staffing needs has added to the interest in diverting calls to other agencies. In 2021, Baltimore began piloting the Behavioral Health Diversion (BHD) program, which authorizes dispatchers to route emergency calls related to non-weapon suicidal ideation to a community partner, Baltimore Crisis Response, Inc. (BCRI), potentially without the involvement of BPD officers. Through January 2024, 53% of the 543 calls to which BHD responded were addressed without police involvement. This equates to nearly 500 police and fire department hours saved through diversion so far.³

This section describes the experiences of three cities with relatively well-developed 911 call diversion programs. The goal is to provide information describing current practices from other cities and an analytic framework for Baltimore as it plans the expansion of its 911 call diversion program. It shows that

there are a variety of models of 911 diversion, that in each city there was a different narrative as to how the city came to move forward, and that those local narratives are important for the design of a diversion model. Each city's innovation has demonstrated positive results, and none of the anticipated problems were realized. We synthesize the features of existing call diversion programs to produce estimates of the financial and staffing impact of expanding diversion programs to additional categories of emergency calls.

The three cities chosen for the study were Albuquerque, Atlanta, and Houston; in Houston we also studied a separate program implemented in Harris County, a suburban area which surrounds the city. Each city is like Baltimore in at least two ways, either in terms of demographic characteristics, evidence of racialized policing and police violence, or evidence of inadequate police responses to behavioral health issues in the community. We made a three-day visit to each city and met with the program operators, interviewed local legislators and other stakeholders, and observed first responders in the field.⁴

This study does not report outcome evaluations of the programs.⁵ Rather we sought to learn how the programs operated, what factors led to their creation, how they were structured in relation to the city government, what problems and successes resulted, and

how they had affected the flow of 911 calls to the police. The variation in the form and function of these programs suggests that specific outcomes would be less useful to Baltimore than the formative evaluation we provide.

There are three categories of innovative responses to 911 calls involving behavioral health (BH) problems. One is the “crisis intervention” approach, which entails training police officers in how to respond to individuals in crisis and connect them with services. This is very different from the crime-fighting role police generally associate with responding to 911 calls.⁶ The second category of response (“co-response”) involves teaming up police officers with a mental health professional to accomplish the same goals. Many police agencies, including BPD, have invested in growing BH training and co-response units.⁷

Neither of these first two innovations deal with the current concern to reduce the involvement of police officers in the lives of residents. They still place an officer with a weapon in situations where the addition of an armed or uniformed responder could exacerbate the problem. Hence, there is an interest in a third type of innovation, sometimes called “community response,” in which the response does not involve a sworn officer at all. The federally backed 988 suicide and crisis helpline is one such example where trained crisis interventionists assist callers exclusively over the phone. 988 intends to replace 911 for calls involving behavioral health that can be addressed remotely. In Baltimore, BCRI has been contracted to operate the 988 helpline in addition to operating

the BHD program for responses in the field to more emergent non-criminal calls. Though community response is usually organizationally bundled with co-response programs, our study is focused on these exclusively civilian response programs.

The shift from police to non-police responders has many consequences. For example, no city vests their civilian responders with coercive powers. If the person they are tasked to help refuses the offer, that ends the matter. Similarly, the responders cannot direct traffic away when someone with a behavioral health problem is in the streets. They may not be able to enter private property, even with expressed consent. Some alternative responses, such as those involving licensed clinicians, are slowed by administrative processes imposed by professional regulations. Meanwhile, the field staff of the diversion agencies seem to be much more patient in dealing with behavioral problems than police. For the police, responding to an angry and unhappy young woman who has called 911 without a specific criminal complaint (as we observed in Houston) is a diversion from fighting crime. It is the essence of the new units’ function: providing help to individuals in distress.

In all three cities, there was a history of recent incidents in which police were accused of killing young males, frequently from minority groups. Trust between the citizenry and police department was low (Ren et al., 2022).⁸ This served as an important background motivation for the innovations, even if increasing trust was not identified as one of the objectives of the program.

Diversions Programs Case Studies

Albuquerque

Albuquerque is an ethnically diverse city of 565,000, with Latinos as the largest population group. The Albuquerque Police Department has a high rate of killings by officers and has been operating under a federal consent decree since October 2014. Albuquerque's diversion program (Albuquerque Community Safety: ACS) was initiated by the mayor as a response to the 2020 George Floyd killing. There is no evidence of substantial outside pressure in favor of this specific reform. The diversion program has been set up as an independent agency, at the same level of government as the Police Department and the Fire and Rescue Department, though still much smaller. Its focus has been particularly on the unsheltered population, a response to a very visible and prominent problem in the city.

ACS has expanded rapidly in its less than two years of operation. As of October 2022, when we visited, it had 40 field staff and 12 administrative staff. It is now part of the routine of the city's handling of 911 calls. In the first eight months of the Fiscal Year 2023, ACS handled 14,634 calls diverted from 911. For comparison, the Albuquerque Police Department receives 1.1 million calls annually.⁹ The total budget for FY 2022 was \$7.7 million,

with expectations of substantial short-term growth.¹⁰ The categories of emergency calls for service that are eligible for ACS response are provided in Table A2 of Appendix A.

ACS lists four goals: to implement a holistic and trauma-informed response to 911 calls; to build ties with other city and county agencies and nonprofit service providers; to engage with citizens and community stakeholder groups; and to inform the way public health and safety services are delivered.

After the ACS teams reach the site of a call, they may decide that police are needed either as a supplement or substitute. Similarly, police units might call for an ACS team. An initial concern, expressed particularly by police organizations, was that untrained and unarmed staff would be vulnerable to harm in dangerous situations. After two years and many thousands of responses, there were no recorded reports of any such incidents.

ACS leaders are concerned about the difficulty of finding services for their clients. Too often they can only take them to an Emergency Department at a local hospital. The city and state provide very limited substance abuse, mental health, and housing programs.

Atlanta

Atlanta's population was 499,000 in 2022; its metropolitan area contained 6.2 million. Atlanta is one of the biggest U.S. cities in which the largest racial group is Black (48%). The Atlanta Police Department (APD) is comparable to other departments around the nation when it comes to use of force and civilian complaints.

The origins of this diversion program (Police Alternative and Diversion Initiative: PAD) lie in activists' efforts to reduce the number of incarcerated persons in Atlanta. For many years, activists have sought the closure of the city's jail, which has a capacity of 1,100 inmates. The Atlanta Police Department's high levels of arrests for minor, non-violent offenses (particularly among minorities) and a high profile killing of an unarmed civilian (Rayshard Brooks) also provided impetus for the creation of PAD. The focus is particularly on the large and very visible population of unsheltered individuals, who have offered a major challenge for the APD.

PAD is operated as a nonprofit organization, which is funded by but independent of the Atlanta City government. Initially, it responded only to 311 calls but now accepts 911 calls that fall in a small number of specific categories that are likely to involve non-violent behavioral health problems. These include calls related to homelessness, drugs, public intoxication, and mental health issues.

Police officers can also call PAD to send a Harm Reduction Team or bring individuals to PAD's offices, where they receive very short-term services (clothing, food, a place to rest) and connection to other services, such as medical care and housing. Individuals can also go to the PAD offices directly if they have an "open warrant and active criminal case." The PAD management is concerned that the program be targeted to reduce police-citizen interaction and not to provide police with another way of disposing of non-criminal behavior (net-widening). Reflecting those concerns, its monthly reports include data on the criminal charges faced by its clients. One of its metrics is criminal recidivism before and after contact with PAD.

In 2022, PAD had a budget of \$7.8 million (much of it from the federal pandemic funds received under the American Rescue Plan) and a staff of approximately 50. The program has received few diverted 911 calls. In the first five months of 2023, 96 individuals were diverted from police arrest and most responses were calls to provide basic needs for unsheltered persons.¹¹ Another operational problem comes in connecting individuals to resources. This led PAD to successfully lobby state agencies to make an additional \$4 million available for housing vouchers; this outreach is laudable, but it also involves time spent outside the PAD's core purpose. The nonprofit status of PAD makes it vulnerable to local politics.

Houston and Harris County

Houston is the fifth largest city in the nation, with a population of over 2.3 million. It is situated mostly in Harris County, which has an overall population of 4.9 million. Houston is one of the most racially diverse big cities in the country, and its police department has been accused of excessive use of force against its Black residents.

The Houston Crisis Call Diversion Program (CCD) was established in 2016 to handle non-violent mental health calls over the phone by trained crisis responders housed in the Houston 911 call center. In 2021, the call diversion infrastructure grew to include Mobile Crisis Outreach Teams (MCOT) for in-person assistance and case management. Both CCD and MCOT are administered by the Harris Center, a nonprofit mental health authority, in partnership with Houston Police. These programs follow CIT and other successful BH-focused Houston PD programs. The main objectives of CCD and MCOT are to provide a more appropriate response to mental health crises than the actions police officers can take, to link patients to services, and ultimately to reduce police burden.

CCD operates from 6 a.m. to 10 p.m. and routes calls for mental health crises that do not require immediate physical response to trained counselors. Counselors spend about an hour per call working with a client to de-escalate and resolve each incident. MCOT responds to calls that cannot be resolved over the phone but do not need a police or EMT response, and these teams

are available 24/7. The MCOT teams include psychiatric professionals and provide acute care, case management, and referrals for continued treatment.

One interesting aspect of CCD is its main objective—to avoid sending police to 911 calls when they're unlikely to be needed. The program is widely seen as successful, but it has not significantly scaled up.

Harris County created the Harris County Holistic Assistance Response Teams (HART) Program in 2022. It operates in a 148 square mile suburban portion of Harris County that borders Houston. It is not affiliated with CCD or the Harris Center. The program is similar in organization and function to PAD in Atlanta. Administered by a nonprofit, it diverts non-criminal emergency calls to civilian teams consisting of an EMT and a behavioral health specialist. The program's goals are to reduce the workload on patrol officers, decrease repeat-call volume, and connect citizens with county services. The program currently only fully serves roughly 10% of the entirety of the county. Nonetheless, HART's successes cannot be overlooked, with 40% of calls receiving social services on-scene and 6% entering a case management relationship with the program and subsequently being connected with longer-term services when possible.

Both CCD and HART face challenges, including limited inter-agency trust and politics for CCD and risk aversion and ambiguous calls for HART.

Concluding Comments

One important observation is simply that these programs operate as intended. In each of the three cities, they are seen as successful and face, as best we could tell from interviews and scrutiny of the local media, little criticism.

Police, both individually and as departments, are increasingly supportive of these initiatives. Even police unions do not appear hostile, notwithstanding that shifting to social or clinical workers reduces the need for more police officers. There are two principal motivations for this support from the police. First, many individual police officers do not feel well equipped to respond adequately to behavioral health calls; it is inconsistent

with their understanding of what constitutes police work. Second, the persistent and large recruiting shortfall of each city's police department makes them supportive of load shedding. Moreover, 911 call diversion programs are marked by compassionate and patient responses to incidents. This will likely grow public expenditures in the short run. Staffing requirements grow with the reciprocal of time spent responding; spending an hour per call instead of 20 minutes effectively triples the number of responders necessary to resolve the situation. Staffing these positions may be difficult. Labor shortages are as serious in the behavior health sector as in policing.



Justin Fenton, The Baltimore Banner

None of the programs has encountered serious operational problems. The fear that unarmed civilians would be placed in dangerous situations has not been realized. Selecting the right categories of 911 calls to pass on to these diversionary units is clearly important. Each city has worked out its own set of criteria and procedures for diversion, and some encompass riskier calls than others, though every list is shorter than program advocates would like because of agency risk aversion.

A tenet of the 911 system is that every call should produce an in-person response. That is what makes calls for service such a burden on the police, as most calls do not, *ex post*, require a visit by an armed officer with coercive powers. Houston's CCD program directly challenges that assumption.

Each program has a distinctive origin story, both in political and administrative terms. For example, ACS came out of the Albuquerque mayor's office during political crises, while Houston's CCD was an almost routine administrative initiative by mid-level police officials with no political instigation or visible involvement.

The origins shape how the program is structured in two senses. First, it helps explain where each program is placed in the city's government. The origins have a second effect. The goals of the program may be shaped by what sparked its creation. Atlanta's experience makes that point most distinctly. PAD was created as part of the effort to reduce incarceration. Referral to PAD was an alternative to arrest, and the operators of the program are

explicitly concerned about avoiding net-widening, which involves the police bringing individuals whom they would not otherwise have arrested to PAD. PAD publishes statistics on the reduction in arrest frequency for the six months before and after a PAD contact. In contrast, Houston and Harris County were concerned about improving the efficiency with which 911 calls are handled. They each focus on the volume of calls diverted away from police; a comparative cost analysis is important to the managers of the program.

The potential for load shedding may be substantial but none have yet made more than a small contribution. Even in Houston, by far the most mature of these programs, the results seem modest to date. In 2022, the CCD only handled about 4,500 calls that were initially directed to the Police or Fire Departments. By comparison, the total service call volume for Houston PD and Houston Fire Department in the same period were 1,075,954 and 384,229, respectively.¹²

Considerable time is needed to set up these diversion initiatives. It involves not just recruitment of staff and planning of how the service relates to existing emergency response but also the time needed to bring potential stakeholders along. In Atlanta, where the initiative came from outside government, external funding to bring local politicians and other stakeholders to see the operation of a related reform in Seattle—Law Enforcement Assisted Diversion (LEAD)—was very helpful, in part because it improved relations between the advocates and the elected officials.

Consequences of Transitioning 911 Calls to Civilian Responders in Baltimore

Police in Baltimore face two difficult challenges when responding to 911 calls. The first is an issue of scale. The BPD is stretched thin by shortfalls in officer recruitment and retention that are far worse than broader trends. Nationally, police officer staffing declined 3.5% between 2020 and 2022, and more than 5% of budgeted sworn officer positions are currently unfilled.¹³ Baltimore was nearly 20% below its planned force size in April 2021 (Baltimore Police Department, 2021). Officers in the city are thus more likely than the national average to be required to work overtime, which is beneficial neither for officers (increased stress) nor for the city's budget (increased pay). When deciding how to distribute scarce labor, the BPD must decide how to distribute officers across patrol and numerous other duties. Under today's severe labor force constraints, they must also confront trade-offs in patrol officer structure between the number of patrols per shift and the number of officers per patrol. Fewer patrols may mean less presence and less responsiveness to community needs, while fewer officers per patrol may lead officers to be more cautious and less able to respond effectively in times of acute need.

The second problem faced by the BPD in responding to citizen calls for service is an issue of scope; officers must deal with a great variety of calls requiring very different responses. There is essentially a coin flip's chance that officers may be called to respond to a criminal incident where coercive force is needed or to an incident where the probability that a crime occurred is vanishingly small, and the very appearance of coercion undermines officers' ability to provide services effectively. There is a growing consensus that many emergency calls could be addressed by civilian first responders with expertise in mental health and crisis intervention but without the competing demands associated with crime prevention and investigation. The national 988 program should divert some calls for which no field response is needed at all. Early experiences in Baltimore with BHD and in other large U.S. cities—detailed above—demonstrates that civilian first responders can potentially handle a large share of 911 call volume where field response is required.

Transitioning low-risk 911 calls to civilian responders frees patrol officer time and can help mitigate the department's current sworn personnel shortfall.

This has the potential to remove police from situations that extend police officers beyond their core competencies. There are several prominent instances where this resulted in tragic outcomes, documented in detail in a 2016 U.S. Department of Justice report on BPD use of force (Kelly, 2016). Diversion programs also free police to focus on their core function of crime fighting. This should lead to improvement in Black citizens' trust in the police based on the feedback of Baltimore residents described in the first volume of this report.

To examine the feasibility of an alternative response program, we used the BPD's data to develop a simulation-based model.¹⁴ We demonstrate the model's value by considering three call diversion program design scenarios. The first is based on existing practices in three large urban jurisdictions that have already begun diverting some calls to civilian responders, as described in the previous section. The second is based on the empirical probability that a call pertains to a serious crime, based on the information provided to call-takers and reported by responding officers.

The third incorporates empirical evidence of need for police as indicated by Baltimore patrol officers themselves.

Our research adds to the nascent evidence suggesting 911 call diversion is a promising policy option. Dispatching civilian first responders to emergency calls results in direct cost savings because police officers are typically better compensated than civilian responders, such as paramedics and social workers. On a per-call basis, these savings however are offset by increases in the time first responders are likely to spend on-scene at an incident; taking care of individuals with behavioral problems is a time-consuming activity. On a per-caller basis, a successful resolution to one call, however time consuming, may obviate many future calls.¹⁵ Call diversion also generates indirect time and fiscal cost savings through a reduction in arrests. Pilot programs in several U.S. cities dispatch civilian responders to a variety of emergency calls, and early evaluations indicate that they reduce criminal activity (Pyne & Dee, 2022).

Design Scenarios for 911 Call Diversion in Baltimore

The BPD responded to about 421,000 community-initiated emergency calls each year between fiscal year 2015 and 2020.¹⁶ Using administrative data provided by BPD we evaluate the budget and time use impacts of delegating low-risk emergency calls in Baltimore to civilian responders. These administrative data include the location, type of incident, time of day, investigation time, and how each call was resolved (e.g., whether a police report was written).

In the first design scenario, we base the types of calls diverted to civilian responders on existing practices from programs in Albuquerque, Atlanta, and Houston, referred to hereinafter as early adopter programs. We identified five constructs for which call diversion is commonplace in these existing programs, then mapped these to the Baltimore data (see Table 1). We identify nine incidents to which the early adopter programs respond in the Baltimore calls for service data: behavioral crisis,

disorderly person, intoxicated person, lewd act, panhandling, person lying on street, sick person, suicide, and suspicious person.

Theoretically, just over 20% of all calls could be diverted to civilian responders under this scenario. This reduction effectively frees police time equivalent to 59 full-time patrol officers

(95% Confidence Interval: 43 – 75 officers), which corresponds to nearly 10% of the department’s current shortfall.¹⁷ However, no program in a large city has grown to this scale to date. Assuming civilian and police training and materials costs are commensurate, we estimate that the net effect on the city’s public safety budget is negligible.

Table 1. Calls Currently Assigned to Civilian Responders by Early Adopter Call Diversion Programs

Construct	Baltimore	Albuquerque ACS	Atlanta PAD	Denver STAR	Houston CCD/MCOT
Intoxication and substance abuse	Intoxicated person Person lying on street Sick person	Person down with no safety issues (with or without suspected drug use)	Intoxication and substance abuse	Intoxication	
Syringe disposal	None	Needle pickup		Syringe disposal	
Mental and behavioral health crises	Behavioral crisis Suicide	Mental and behavioral health crises Suicidal ideation and suicide attempt	Mental and behavioral health crises	Suicidal ideation and suicide attempt	Suicidal ideation and suicide attempt
Needs of unsheltered and indigent individuals	Panhandling Lewd act	Panhandler Unsheltered individuals Welfare checks	Homelessness and public indecency		Welfare checks
Non-criminal disturbances	Disorderly person Suspicious person	Disturbance Suspicious person		Trespass	Disturbance Suspicious persons and events Trespass

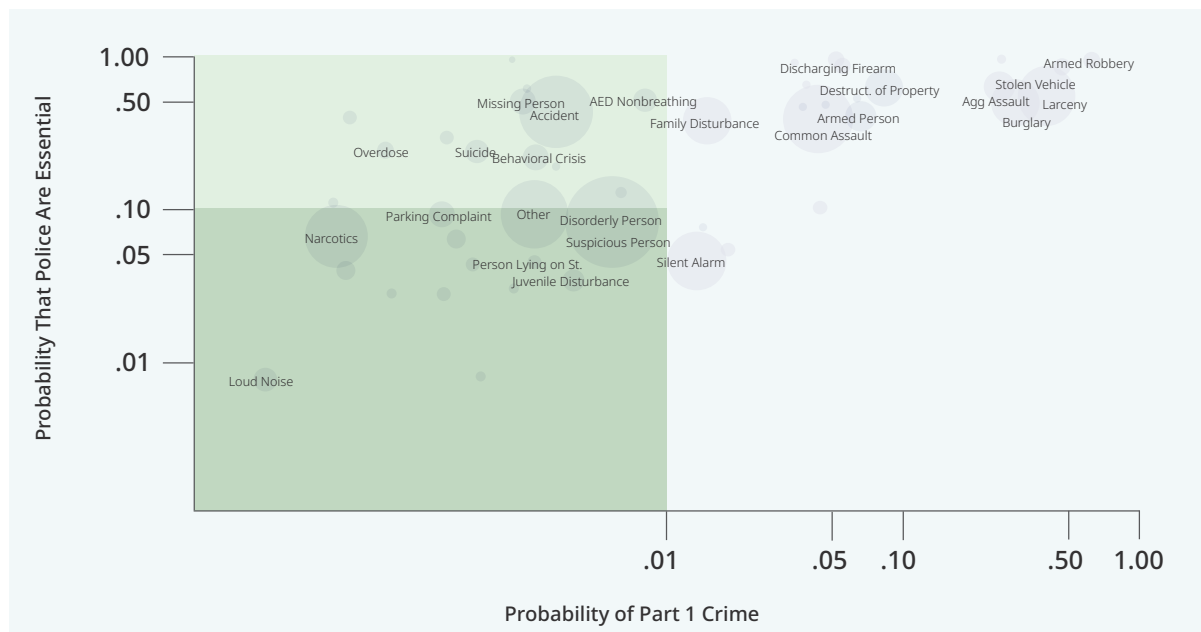
We also consider a “restrictive” scenario that diverts calls with less than 1% probability of Part I crime and less than 10% probability of generating a police report (darker shading alone).¹⁸ The police report is an indication that police were in fact required to resolve the call. In the BPD data, we observe mutually exclusive and complementary officer determined call dispositions for incidents where officers can act: a report was written after an incident, police determined that they were not needed, or the incident was resolved by police without a report recorded. We consider the latter two outcomes to determine when police were not essential to resolve a call. Finally, we consider a “permissive” scenario; that is, one that diverts calls that have less than 1% probability of Part I crime.

In Figure 1 below, the shaded areas represent regions that would be diverted under the

restrictive (darker shading) and permissive (lighter shading) 911 diversion program design scenarios. The size of each circle in the plot indicates the volume of each incident type observed over FY2015-FY2020. Over 40% of calls would be diverted under the restrictive scenario and nearly 60% would be diverted under the permissive scenario.

Notable in this plot is the concordance between the two measures. Many common incident categories rarely result in a recorded crime or the need for a police officer response. For example, fewer than 1% of calls involving disorderly persons resulted in a Part I crime, and the responding officer filed a police report for only 8.5% of disorderly person calls. Juvenile disturbances, parking complaints, and loud noises also fit this description.

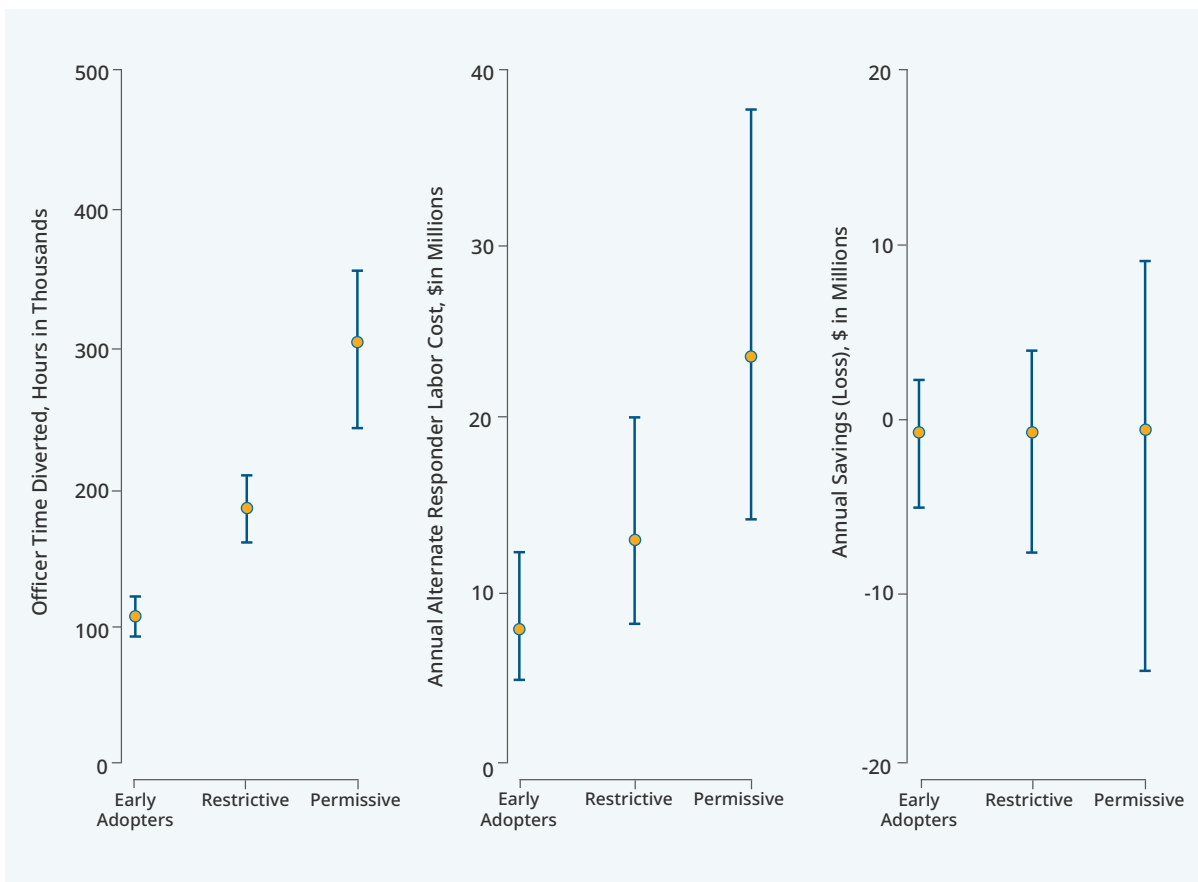
Figure 1. Outcome Probabilities of Emergency Calls Assigned to Baltimore Police by Category, FY2015-20



The restrictive and permissive design scenarios each result in larger time savings for patrol officers but with commensurate increases in the uncertainty about whether a civilian will be dispatched to a call involving

a crime in progress (See Figure 2). While we did not design these hypothetical programs to be cost-neutral, all three were with varying degrees of uncertainty.

Figure 2. Outcome Estimates for Alternate Design Scenarios



Note: Dots correspond to mean estimates generated for each scenario by a Monte Carlo simulation model; lines reflect 95% confidence intervals around the mean estimate.

Measuring the Relationship of Police Responses to Race, Ethnicity, and Structural Disadvantage in Baltimore

Our analysis assumes that 911 call diversion programs will function similarly across demographically distinct areas within a jurisdiction. We tested whether policing behavior depends on the characteristics of the community being policed to further probe this assumption. We consider the relationship between neighborhood racial and ethnic composition, socioeconomic conditions, and four measures of police performance in response to emergency calls for service: response time, investigation time, the rate of reports filed, and arrest clearance rate for Part I crimes. We found these outcomes are not strongly related to structural disadvantage after accounting for potential confounders. There is no measurable relationship between neighborhood racial or ethnic

composition and the probability of report or arrest. We observed one puzzling finding that, all else equal, response times are on average faster and investigation times are shorter in communities with larger Latine populations.¹⁹ See Appendix B for more details on this analysis.

While we find that neighborhood disadvantage does not exert a major influence on policing outcomes from 911 calls (see Appendix B), the measures we consider may miss important nuances in community-police interactions. Our data do not allow us to differentiate the nature or substance of police responses while on-scene, and we have no information on whether complainants were satisfied with the resolution of the incident.

Concluding Comments

Based on three potential program designs, call diversion to civilian first responders could help Baltimore fill police staffing gaps with civilian first responders at comparable cost to sworn officers. Our case studies of early adopter cities also suggest that a diversion program could also improve police efficiency, performance, and relations with the community. While this analysis is focused on the time use and cost implications of call diversion, the broader literature on civil-police relations suggests there may be significant nonpecuniary benefits that we do not consider. As already noted, reduced police involvement in low-risk emergency calls lowers the likelihood of violence between police and marginalized

communities. Even if officers' propensity to misuse force against people from marginalized groups remains the same, the frequency of harmful incidents may decrease. Greater reliance on social workers and treatment programs may also improve community well-being, especially given that many programs entail follow-ups by civilian responders (Irwin & Pearl, 2020). These follow-ups generate financial and social benefits and may reduce the likelihood of future 911 calls concerning these individuals. In time, diversionary programs may even improve police-community relations, as residents learn that calling for help may indeed return the kind of help they are seeking.

Implications for Baltimore

Baltimore's Black residents know that the police are an important institution in their lives. Part 1 of this report describes the tension Baltimoreans feel when confronted with a public safety emergency, weighing their need for emergency response against their hesitation to engage with police. The residents we interviewed acknowledged that the Baltimore Police Department has a tough job and that many officers aim to improve citizen safety.

Given the existing mistrust, reducing police involvement to non-criminal incidents, thus the opportunities for inappropriate responses, is an important goal. The experiences of a few other cities that have tried to divert low risk categories of service calls to agencies other than the police department are likely to be helpful in that respect.

We conclude by offering a few observations about the feasibility of a 911 call diversion initiative in Baltimore:

Expect this initiative to be successful.

Baltimore is typical in its cautious start with a small pilot program of limited scope. We believe that our more systematic analysis of the BPD emergency call response provides actionable guidance on which categories of 911 calls are suitable for diversion to civilian first responders. The experience of other cities provides strong evidence that this kind of innovation can be effective and helpful.

Do not anticipate substantial reductions in service call demands or public spending on public safety in the early years of operation at scale.

Successful programs in Albuquerque and Houston handle only as much as 5% of all service calls, which indicates there are problems in moving to scale. No existing research addresses why this is so but there appear to be subtle barriers that can only be overcome with more experience and analysis.

Take advantage of existing data and analyses to identify categories of calls for service that are unlikely to require response by an armed officer.

The analysis presented in this report is a starting point for evaluating which calls are feasible for diversion to civilian responders. The BPD has access to additional data, which can be used to develop a more sophisticated scheme for identifying and dispatching civilians to low risk 911 calls. A successful diversion effort will also likely entail an ongoing investment in dispatcher training and support, with attention toward minimizing misidentification of high-risk emergency calls.²⁰ Notably, BHD has already built out a quality assurance mechanism to review program operations, discuss challenges and opportunities can be discussed with stakeholders, and ultimately inform the program's growth.

The program that takes shape is a product of its environment.

Baltimore's current diversion program relies upon a

Baltimore has taken important steps to address gaps in behavioral health service provision through the establishment of BHD, the roll-out of 988, and planning for the interoperability of BHD and 988.

community partner. Unlike its Atlanta counterpart, the nonprofit is not engaged in political advocacy. Like its Harris County counterpart, it may benefit from integration with public health data and case management infrastructure. Reliance on external partners for call diversion increases the program's vulnerability to external criticism. If it runs into operational problems, then the diversion program's entire existence is in jeopardy; the city government can simply cut funding and ties with the external partner. Though political context varies from place to place, a government agency is better insulated against short-term political whims. Moreover, government agencies may enjoy greater access to data that will lead to improvement in their operational effectiveness over time. On the other hand, programs formed in nonprofit community-based organizations may avoid stigma associated with government and may be perceived to be more accountable and responsive to the community.

Each program we observed grew pragmatically based on its placement in existing local structures and politics. Even the programs that are used as benchmarks are likely to have limited generalizability. For example, Seattle's harm reduction-based LEAD program is not politically feasible everywhere. Further, its focus on low-level criminal events as the point of diversion rather than non-criminal calls also changes incentives for participation among

clients and limits the scope of clientele to which services might be offered.

Baltimore has taken important steps to address gaps in behavioral health service provision through the establishment of BHD, the rollout of 988, and planning for the interoperability of BHD and 988. Given continued thoughtful planning and implementation, the expansion of Baltimore's 911 diversion program has the potential to achieve its goals of addressing the gap in behavioral health services in the city.²¹ The program will not only have the short-term effect of reducing negative police-citizen interactions in behavioral health settings but may also have long-term effects for police legitimacy. Understanding how similar programs work in other cities, learning lessons from them, and adapting the plan to Baltimore accordingly is key.

Develop performance metrics that match the goals of the program. The number of 911 calls diverted is an incomplete accounting of the benefits of these diversionary programs. There are two, perhaps even three, other important benefits, each of which is hard to quantify. The first is that the response offered by ACS or HART or any of these programs may be more appropriate and higher quality than those provided by uniformed police officers. Social or clinical workers are comfortable spending more time with persons who need help and can better

connect them to post-call services that will help deal with the underlying problem. For most officers, this is time taken from their primary mission of fighting crime.

The second benefit, which is not only hard to quantify but even to properly conceptualize, is improving police-resident relations. Reducing the number of times an armed officer must manage an individual experiencing psychiatric problems is likely to reduce the number of times that force is used in troubling ways to control an arrestee.²²

The other hard-to-quantify benefit is that these initiatives may either reduce or increase the number of calls for service. A modest share of callers account for a substantial share of all calls (Middleton et al., 2014). Helping one of them with their underlying problem may noticeably reduce calls. Thus, the demands for police services may be smaller. On the other hand, Baltimore's strained police-community relations complicate the way a call diversion program's success should be measured. Baltimore

residents' current skepticism of the utility of police means that many potential calls for quality of life and lower-acuity circumstances that would be routinely reported in other cities do not take place in Baltimore.

Call diversion programs introduced by other localities are aimed in part to reduce 911 call volume. If a call diversion program is successful, residents may feel more comfortable or confident in calling 911 or 988, thereby increasing calls.

This phenomenon is most likely among incident types that are reassigned to civilian responders but may spill over to incidents for which police remain first responders.²³ If effective, 988 will replace 911 for some calls. Callers experiencing or witnessing a crisis are likely to continue to call 911 if they believe the situation requires a response in the field. In any case, we view increased emergency service utilization as desirable since it is evidence that residents trust the city to respond in their time of need.



Kaitlin Newman, The Baltimore Banner

A pilot that extends beyond the city's current diversion program to a wider variety of 911 call-generating incidents will produce useful data and insights for agencies and stakeholders.

Baltimore has rightfully avoided focusing solely on the financial cost of responding to emergency calls; doing so ignores other potential costs and benefits they create. Social and clinical workers will often take longer and hence may raise the cost of responding to certain types of emergency calls. However, recent evidence from an evaluation of Denver's STAR program suggests those costs are offset by the cost savings from averted arrests (Pyne & Dee, 2022). Caller satisfaction and the effect on caller recidivism (i.e., the number of emergency calls made by the same caller within, say, the next three months) are two other useful metrics. There are likely other measures that can provide useful guidance about the operational effectiveness of a diversion program that are not considered in this report.

Tailor the program to the city's needs and capabilities. To date, the first call diversion effort by each city from which we draw insights is just a small-scale pilot program. As the evidence base accumulates, perhaps codified by a broad-based associa-

tion such as the U.S. Conference of Mayors or Council of State Governments, it will be possible to start larger scale efforts. Baltimore, too, should consider expanding the current diversion program, first in a limited-service area—e.g., two or three of the city's nine police districts—rather than citywide. A pilot that extends beyond the city's current diversion program to a wider variety of 911 call-generating incidents will produce useful data and insights for agencies and stakeholders. It would also allow program architects an opportunity to revise program design based on preliminary experiences. Eighteen months is probably a reasonable estimate of the time it takes from the initial decision to set up a diversion program to the actual implementation, though implementation is easier when building on existing partnerships (Houston) than forging new ones (Atlanta) or resolving past acrimonious interagency relationships (Albuquerque). An additional six to twelve months of program operations in a limited geographic scope would provide adequate data to inform expansion.

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Endnotes

- 1 A more detailed discussion of the data, model, and analysis presented in this report can be found in this journal article: <https://www.tandfonline.com/doi/full/10.1080/07418825.2023.2300444>.
- 2 Best practices for law enforcement agencies (LEA) suggest patrol officers spend roughly 40% of their time on calls for service. Many LEA develop staffing plans that follow the “Rule of 60,” which dictates that 60% of officer time is spent on patrol and 60% of patrol time is spent responding to community-generated calls for service. See https://icma.org/sites/default/files/305747_Analysis%20of%20Police%20Department%20Staffing%20.%20McCabe.pdf.
- 3 According to BPD, the program had saved nearly 500 hours of police and fire department time as of January 2024. See <https://www.thebaltimorebanner.com/politics-power/local-government/one-year-in-baltimore-officials-say-911-diversion-system-needs-more-time-to-prove-itself-TKSQFKR3UJE4BKUZBZ5ITZVZIQ/>.
- 4 Appendix Table A1 reports key features of each of the diversion programs described below.
- 5 The Crisis Call Diversion Program operating in Houston is currently under evaluation by the Research Triangle Institute. The two other programs are too new to make any meaningful assessments.
- 6 Nationwide, over 2,700 departments have undertaken this kind of training for some or all their sworn personnel. Most agencies follow a standardized 40-hour curriculum for crisis intervention training. For more information, see <https://bja.ojp.gov/program/pmhc/learning#types-of-pmhc-programs>, [https://www.nami.org/Advocacy/Crisis-Intervention/Crisis-Intervention-Team-\(CIT\)-Programs](https://www.nami.org/Advocacy/Crisis-Intervention/Crisis-Intervention-Team-(CIT)-Programs), and <https://www.citinternational.org/research>.
- 7 All BPD patrol officers receive basic BH training in partnership with Roca, and the Department aims to equip 30% of patrol officers with 40-hours of crisis intervention training.

- 8 We could only identify one specific study for Houston, but there are a number of national studies (<https://news.gallup.com/poll/394283/confidence-institutions-down-average-new-low.aspx>) and some that use a subset of large cities that include those in this report in addition to a number of other cities.
- 9 See <https://www.krqe.com/news/albuquerque-metro/apd-addressing-long-9-1-1-and-242-cops-call-wait-times/>.
- 10 See <https://www.cabq.gov/acs/documents/acs-organizational-plan-20211207.pdf>.
- 11 See <https://static1.squarespace.com/static/5e9d44f40c5f6f43eacf969b/t/648a0f803200333f6c45fe5a/1686769541615/PAD+May+2023+Report+-+Updated.pdf>.
- 12 See <https://houstontx.gov/fire/reportsandstats/index.html> and https://www.houstontx.gov/police/department-reports/operational_summary/NIBRS_MonthlyOperationalSummary_Dec22.pdf.
- 13 A 2022 Police Executive Research Forum survey shows a steady decrease in staffing over the past two years. See <https://www.policeforum.org/workforcemarch2022>.
- 14 We developed the call diversion program simulation model for any jurisdiction considering 911 call diversion, allowing policy designers to choose inputs and underlying assumptions to fit the local conditions. Based on a set of inputs that are measured with uncertainty, the model uses a Monte Carlo method to estimate the most likely expected outcomes and quantify the uncertainty around that outcome.
- 15 Our analysis does not consider these potential downstream impacts of call diversion.
- 16 Baltimore's fiscal year begins on July 1 and ends on June 30.
- 17 In April 2023, the judge supervising the BPD's Consent Decree stated that the department required 2,600 sworn officers to achieve the objectives of the Consent Decree but was operating with only 2,100 sworn officers. See <https://htv-prod-media.s3.amazonaws.com/files/quarterly-public-hearing-outline-4-13-23-6438611645ff8.pdf>.
- 18 Part I crimes include the most serious crimes: assault, theft, homicide, among others. Unfortunately, no data were available on less serious crimes. For Part I crime definitions, see <https://ucr.fbi.gov/crime-in-the-u.s/2019/crime-in-the-u.s.-2019/topic-pages/offense-definitions>.
- 19 We use "Latine" as a pan-ethnic, gender inclusive alternative to "Latina" and "Latino."
- 20 The Pew Charitable Trusts (2021) found less than half of emergency communication centers provided behavioral health crisis training to identify high priority calls. See <https://www.pewtrusts.org/en/research-and-analysis/issue-briefs/2021/10/new-research-suggests-911-call-centers-lack-resources-to-handle-behavioral-health-crises>.
- 21 The city of Baltimore provides an overview of the city's progress implementing 911 call diversion through spring 2023 in this report: <https://drive.google.com/file/d/1cuacRAvPcucqLphzCk0Hts-XeDrhbIGC/view>.
- 22 For an example of this kind of incident, see <https://www.washingtonpost.com/dc-md-va/2023/07/25/video-officers-tackle-mentally-ill-man/>.
- 23 It may be difficult to ascertain the degree to which call volume changes are driven by residents' propensity to report incidents, as opposed to changes in the rates of actual incidents. This could theoretically be measured by comparing call volumes for potentially affected incident types to incidents that are reliably reported to 911 and unlikely to be impacted by a call diversion program, e.g., fires, traffic accidents, and motor vehicle thefts, but such a method makes strong assumptions about the relationship between impacted and non-impacted incident rates over time.

Appendix A

Table A1: Characteristics of diversion programs in three cities

	Albuquerque	Atlanta	Houston	Harris County
Creation date	September 2021	2016	2016	March 2022
Who runs the agency?	An independent public agency parallel to the Police Department	A nonprofit funded by the city	A county public health agency in collaboration with police	A nonprofit funded by the county
Why was it created?	Mayor responding to George Floyd killing; prior order of consent decree to reduce unnecessary police use of force toward unsheltered community	Part of struggle to close city jail; increasing population of unsheltered persons during pandemic for which police response was inadequate	Mid-level administrative initiative to reduce police workload burden	Sheriff responding to trends in deputy time use
What is the primary goal?	Reduce police/citizen contact	Reduce use of incarceration as response to mental health calls	Reduce police/citizen contact	Reduce use of officer time for non-criminal calls
Who responds to calls?	Mobile Crisis Teams, Behavioral health responders, Community responders, and Street outreach workers in teams of two	Two-person Harm Reduction team, made up of community engagement specialists, community responders, peer advocates, care navigators/caseworkers, and clinical advocates	CCD crisis phone counselors or Mobile Crisis Outreach Team (psychiatrists, RNs, licensed clinical therapists, and psychiatric technicians)	Employees of DEMA Consulting and Management
Types of calls diverted	Mental health, substance use, and homelessness. See Table 2 for full detail	311 calls concerning disturbances, public indecency, welfare, mental health, substance abuse, basic needs, or public health and pre-arrest diversion referrals	Mental health-related incidents that are low urgency (Priority 3 or greater) ²⁴	Non-violent incidents involving mental health episodes and unsheltered persons
Average calls handled per month	2,000 (Aug. 2022 - now)	125 (Jan. 2023 - now)	378 (2020)	278 (Jan. – June 2023)
% diverted from PD	~2.48%	~0.4%	~0.29%	~1%
Budget	\$12 million	\$7.8 million annually	\$12.6 million	\$7.6 million

Table A2. Categories of Calls for Albuquerque Community Service (ACS)

Responding Team	Call Description
BHR: Behavioral Health Responders	<ul style="list-style-type: none"> • Suicide • Behavioral health issue • Disturbance • Suspicious/intoxicated subject • Wellness check • Panhandler • Welfare check • Message for delivery
CR: Community Responders (Dispatched by AFR Alarm Room; Triaged by 311)	<ul style="list-style-type: none"> • Wellness check • Abandoned vehicle: APD: 24 • Abandoned vehicle: 311 Ticket • Needles
SO: Street Outreach and Resource Coordinators (Triaged by FCS and 311; Not Dispatched by AFR Alarm Room)	<ul style="list-style-type: none"> • Unsheltered individual • Needles

24 See https://www.houstontx.gov/police/general_orders/600/600-01%20Response%20Management.pdf.

Appendix B: Measures for Analysis of Response Time

We use the Social Deprivation Index (SDI) to measure structural disadvantage in Baltimore prepared by the Graham Center (2023). Based on SDI, most residents of Baltimore face extreme structural disadvantage. In the city, 62% of census tracts are in the index's top quartile and 38% are in the top decile. Its socioeconomic conditions also stand in stark contrast to the rest of Maryland, which has an average SDI in the 38th percentile nationwide. Within the city, Black and Latine persons reside disproportionately in disadvantaged communities (Midgette, Spreen, Porter et al., 2024).

We measure response time, investigation time, report rate, and arrest clearance rate using administrative data provided by BPD (see Table B1 for descriptive statistics).²⁵ In Baltimore 911 calls are concentrated in disadvantaged Census tracts, and most 911 calls are made from communities with predominantly Black residents.²⁶ On average, BPD patrol officers respond to calls in under fifteen minutes and spend 39 minutes on-scene, though this varies by incident type and the final disposition of the call (Midgette, Spreen, Porter et al., 2024).

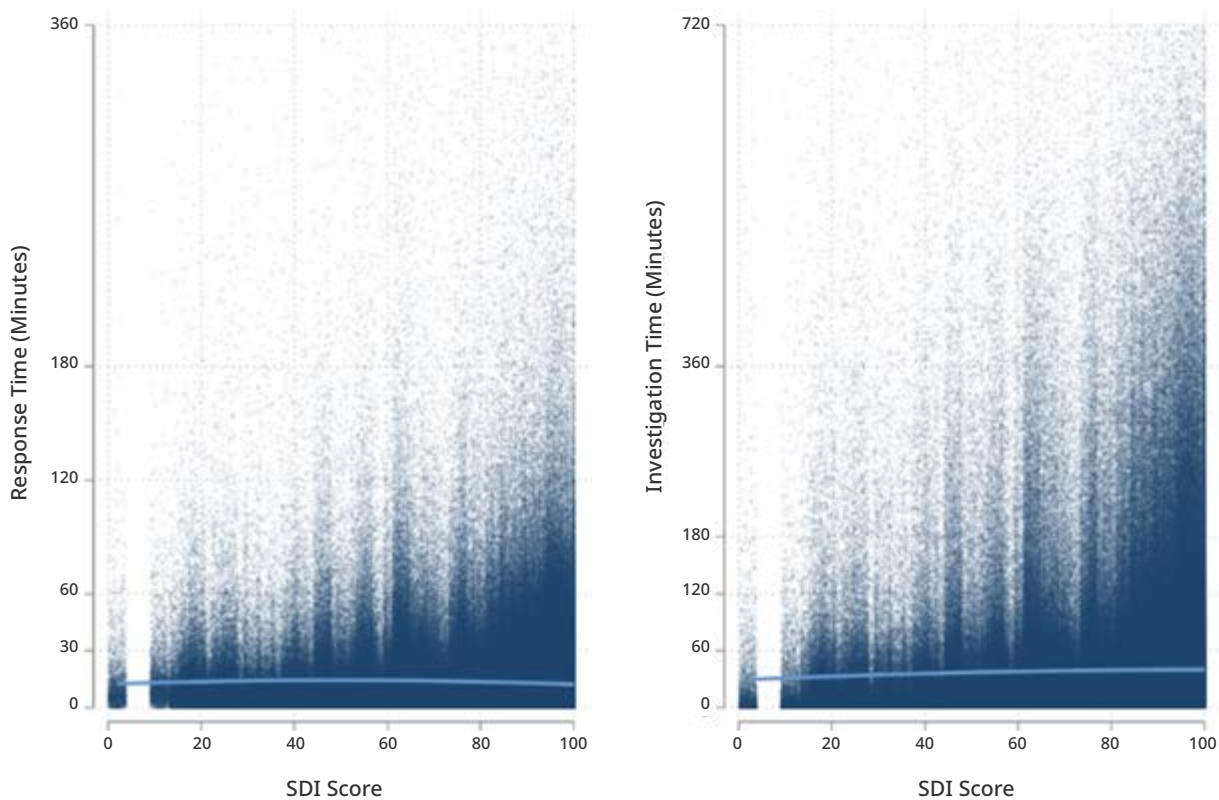
Table B1. Summary Statistics

Measure	Mean (SD)	[Min, Max]
Response Time (Minutes)	13.269 (21.040)	[1, 360]
Investigation Time (Minutes)	38.879 (71.090)	[0, 720]
Report Recorded	0.257	[0, 1]
Arrested (Among Part I Crimes)	0.111	[0, 1]
SDI Score	79.217 (21.010)	[2, 100]
% Black	0.647	[.006, 1]
% Latine	0.064	[.0003, .431]
N		1,456,387

Figure B1 combines scatterplots of the relationship between response time and investigation time with SDI. While the plots suggest positive relationships, the quadratic regression lines in each panel (light blue) indicate that the apparent relationship is driven mostly by the concentration of calls in areas with very high SDI. The bivariate quadratic relationship between response time and SDI suggests response times peak at 14.4 minutes (95% CI: 14.35, 14.48) when SDI score is near 50, which

is below the citywide mean SDI. The estimated response time is otherwise symmetric at 13 minutes at both SDI=10 and at SDI=90. The relationship between SDI and investigation time, on the other hand, is positive and linear based on the bivariate quadratic regression. A ten-point increase in SDI Score increases investigation time by approximately 45 seconds. Similarly, the probability of a report being written and of an arrest conditional on a Part I crime are positively related to SDI.

Figure B1. Relationship of SDI with Response Times and Investigation Times



The relationships suggested by the simple bivariate relationships are echoed in multivariate regression estimates.²⁷ The models indicate that the outcomes lack strong relationships with structural disadvantage after accounting for confounders. The regressions indicate statistically significant but substantively small relationships between SDI and response time, investigation time, and the probability of arrest.

There is no measurable relationship between race or ethnicity and the probability of report or arrest, and the relationship between the percentage of the community that is Black and the percentage that is Latine is negatively related to response time. There is no relationship between race and investigation time; percent Latine is negatively related to investigation time.

Table B2. Components of the Social Deprivation Index

SDI Component Description
Percent Population Less Than 100% FPL
Percent Population 25 Years or More with Less Than 12 Years of Education
Percent Non-Employed for Population 16-64 years
Percent Households Living in Renter-Occupied Housing Units
Percent Households Living in Crowded Housing Units
Percent Single Parent Families with Dependents < 18 years
Percent Households with No Vehicle

25 We base the former two measures on time elapsed between dispatch, arrival on scene, and the time when officers indicate the incident to be cleared. We focus on the sample of cases with non-missing arrival times in this analysis. The fixed effects regression methods we employ should mitigate the risk of potential bias in our estimates, but it is prudent to consider these results with caution. We also have observations that have response times that are negative or greater than six hours and investigation times greater than twelve hours; these are rare and we assume they are erratic.

26 The average SDI Score across all calls is 79 (where 100 equals the most extreme disadvantage and the national mean is 50).

27 Results available upon request.

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