



Essential Metrics for Alternative Emergency Response Programs

Authors: Gabriela Solis Torres and Aloka Narayanan

Contributors: Analisa Sorrells, Ben Appleton, and Marianna Yamamoto

[Alternative emergency response programs](#) have the potential to connect people in crisis to teams of unarmed responders who provide compassionate care and needed services, reduce overreliance on law enforcement, and decrease strain on other first responders. As jurisdictions establish these programs, leaders must use data in real time for performance management and continuous improvement, which can increase programs' potential to deliver on the promise of alternative response. For example, an alternative emergency response program might aim to connect individuals experiencing a mental health crisis to ongoing counseling. By tracking both the number of people referred to mental health services and if they actually access treatment, program leaders can better understand if the program is connecting people to the supports they need to avoid future mental health crises. At the same time, members of the public and policymakers can gauge whether the program is delivering on its promise.

The Harvard Kennedy School Government Performance Lab's (GPL) [data-driven performance management tools](#) help alternative emergency response program leaders and their partners identify the most important data to measure, develop a deeper understanding of program performance, and take informed action to improve outcomes.¹

Measuring and reviewing data is crucial to driving change throughout an alternative emergency response program — not just at one moment in time, such as the conclusion of a pilot or the launch of a program expansion. Program managers and their partners can use data for:

1. **Reactive troubleshooting:** Real-time, rapid identification of performance problems allows programs to make immediate course corrections.
2. **Tracking impact and managing performance:** Reviewing data on a frequent basis over time can facilitate operational improvements that accelerate progress toward program goals. Many of the metrics in this tool measure common intended impacts of alternative response, such as connecting people to services and diverting calls from traditional law enforcement. Tracking and improving metrics like these over time can increase the impact of alternative response programs. Program managers should also build in ways to rigorously evaluate programs (see box below).
3. **Expansion and sustainability:** Identifying program impact, gaps in who is served, and the resources needed to better meet service recipients' needs can determine what the case is for continuing or expanding an alternative response program.

To determine which metrics to prioritize measuring, alternative emergency response program leaders should compare their program's goals to the metrics provided below and establish which of them align with the program's intended impact.

1. For more on how the GPL applied data-driven performance management tools to assist the City of Long Beach in selecting 911 call codes for alternative emergency response, [read this case study](#).

Evaluation of Alternative Emergency Response Programs: To date, there are a small number of rigorous evaluations of alternative emergency response programs.² To evaluate the impact of an alternative response program, outcomes must be compared to what would have happened in its absence. When there are not enough resources to dispatch alternative response to all eligible calls, comparing outcomes between eligible calls that receive alternative response and those that do not may allow jurisdictions to estimate a program's effect. Other approaches that jurisdictions can use to estimate the effect of alternative response include comparing outcomes between the area where the program was launched and a similar, nearby geographic area that does not have alternative response services; or comparing outcomes between times of day when the alternative response team is active to when they are not active.

If you are interested in evaluation of alternative emergency response programs, please contact us at govlab@hks.harvard.edu.

Metrics Bank

The tables below include 29 common, actionable metrics used by alternative emergency response teams to assess and improve their programs. The GPL selected these metrics based on its experience conducting projects with more than 30 jurisdictions in the [Alternative 911 Emergency Response Implementation Cohort](#) and by reviewing publicly available data from 17 alternative emergency response programs. This list is not exhaustive and will be updated as jurisdictions test additional metrics.

Metrics can help alternative response program leaders answer core questions about their program operations and the people they serve. Each metric below is organized by the core question it addresses:

- Are programs successfully triaging and dispatching calls to the right responders? Where are there opportunities to respond to additional calls?
- How is the traditional emergency response system impacted by alternative response teams?
- Do alternative response staff receive the training and support they need to run the program successfully?
- Are there disparities in who is being served or how well their needs are being met?
- Are the people served by alternative response teams successfully connecting to services?
- How are community members, some of whom are not directly served by alternative response, impacted by the program?

Each metric also includes information on three characteristics, listed below.

- **Common Data Source** – Each metric includes a common data source that could be used to measure it. Metrics can typically be collected via existing data sources, such as dispatch and case management systems. Given that data is often stored in systems managed by different agencies (e.g., 911 dispatch system, law enforcement data, alternative response case management system), it is important to establish data-sharing processes prior to the launch of alternative emergency response programs. Data agreements and memoranda of understanding can facilitate the smooth transfer of data between agencies.

2. Rigorous evaluations of alternative response programs include: Dee, Thomas S., and Jaymes Pyne. "A Community Response Approach to Mental Health and Substance Abuse Crises Reduced Crime." *Science Advances* 8, no. 23 (2022): eabm2106. <https://doi.org/10.1126/sciadv.abm2106>.

Townley, Greg, and Emily Leickly. 2023. Portland Street Response: Year Two Evaluation. Portland State University Homelessness Research & Action Collaborative. <https://www.pdx.edu/homelessness/PSR-Evaluation>.

- **Priority** — Metrics should be prioritized differently depending on program maturity. Each metric is categorized as either essential or supplemental.
 - **Essential:** We recommend all programs measure these 19 metrics, particularly in jurisdictions that are new to data-driven approaches. Essential metrics are often feasible to track with existing data, though they may require some data manipulation.
 - **Supplemental:** We recommend that more mature programs build on their essential metrics by considering 10 supplemental metrics, which aim to further improve program reform efforts. These metrics are more likely to include setting up new tools for data collection, such as surveys.
- **Review Frequency** — Metrics should be measured constantly and then reviewed at different time intervals. However, if there are unusual trends or special circumstances, programs may want to review data more frequently. For example, we recommend quarterly review of staff demographics, but programs may choose to review this data more frequently during hiring season. Each metric is categorized by recommended review frequency, including:
 - Weekly
 - Monthly
 - Quarterly
 - Annually

Core Question: Are programs successfully triaging and dispatching calls to the right responders? Where are there opportunities to respond to additional calls?

Metric	Common Data Sources	Priority	Review Frequency
Call volume: Number of calls taken by alternative response team	911 and alternative response dispatch system	Essential	Weekly, Monthly
Call origin: Number of calls taken by alternative response team, by call origin (e.g., self-dispatch, 911, 988, etc.)	911 and alternative response dispatch system	Essential	Weekly
Call type: Number of calls taken by alternative response team, by call type (call code/nature code), including both initial call code and final call code	911 and alternative response dispatch system	Essential	Weekly
Response time: Time from call placed to arrival on scene of alternative response team (average, median, and 90th percentile), disaggregated by time spent on phone call, time from call received to dispatch, and travel time from dispatch to scene	Alternative response dispatch system	Essential	Weekly
Response duration on scene: Time alternative response team spent on scene (average, median, and 90th percentile)	Alternative response dispatch system	Essential	Weekly
Response type: Number of calls alternative response team responded to, by response type (e.g., primary response, co-response with law enforcement, secondary response)	911 and alternative response dispatch system	Essential	Weekly
Call geography: Number of calls taken by alternative response team, by location	911 and alternative response dispatch system	Essential	Weekly
Forgone opportunities: Number of calls appropriate for alternative response team that were not responded to by alternative response team and reason for non-response (e.g., triaged incorrectly, team unavailable, ineligible geographic area, etc.)	911 and alternative response dispatch system	Essential	Monthly

Core Question: How is the traditional emergency response system impacted by alternative response teams?

Metric	Common Data Sources	Priority	Review Frequency
Police calls diverted: Number of calls with call codes previously addressed by law enforcement where the alternative response team was the primary dispatch and no back-up call for law enforcement was placed	911 and alternative response dispatch system	Essential	Monthly
Emergency medical calls diverted: Number of calls with call codes previously addressed by medical services where the alternative response team was the primary dispatch and no emergency room transfer occurred	911 and alternative response dispatch system	Essential	Monthly
Use of force: Number of calls taken by alternative response team where force was used	Alternative response team case management system, law enforcement	Supplemental	Weekly
Use of arrest: Number of calls taken by alternative response team where arrest was made	Alternative response team case management system, law enforcement	Supplemental	Weekly
Cost savings: Money saved from reductions in police response, emergency room use, transport, involuntary commitment, etc.	Law enforcement, hospital systems, emergency medical services, alternative response team case management system	Supplemental	Annually
911 time saved: Change in average call hold time for 911, before program launch compared to current	911 dispatch system	Supplemental	Annually

Core Question: Do alternative response staff receive the training and support they need to run the program successfully?

Metric	Common Data Sources	Priority	Review Frequency
Responder safety: Percentage of calls where responder felt safe	Responder survey; Required question in case management system	Essential	Weekly
Staff retention: Number of staff retained and/or number of staff turned over	Alternative response team human resources system	Essential	Quarterly
Staff training: Percentage of internal and external stakeholders who have received trainings on alternative emergency response (e.g., alternative responders, 911 dispatchers, police officers, fire officials, etc.)	Alternative response team human resources system	Supplemental	Quarterly

Core Question: Are there disparities in who is being served or how well their needs are being met?

Metric	Common Data Sources	Priority	Review Frequency
Service recipient demographics: Number and aggregate demographics of individuals served (e.g., race, age, area of residence, unhoused/housed, gender)	Service recipient survey, on-site or following interaction; or as observed by responder team and entered in case management system	Essential	Monthly
Staff demographics: Aggregate alternative response team demographics (e.g., race, age, gender, zip code, etc.)	Alternative response team staff survey	Essential	Quarterly
Complaints: Number of complaints received about alternative response program	Alternative response team internal data	Essential	Monthly
Repeated need: Number of repeated calls for alternative response team from the same individual or the same address	911 and alternative response dispatch system, case management system	Supplemental	Monthly
Recipient feedback: Number of service recipients reporting their concerns were/were not addressed adequately by responder services	Service recipient survey, interviews, or focus groups	Supplemental	Monthly

Core Question: Are the people served by alternative response teams successfully connecting to services?

Metric	Common Data Sources	Priority	Review Frequency
Call outcome: Number of calls responded to by alternative response team by call outcome (e.g., resolved on scene, called for police or medical backup, arrest, involuntary hold, gone on arrival)	911 and alternative response dispatch system	Essential	Weekly
Referral types: Number of calls resulting in referrals to resources, by resource type (e.g., housing, workforce, mental health)	Alternative response team case management system	Essential	Monthly
Transport location: Number of transports by location (e.g., home, client's home, clinic)	Alternative response team case management system	Essential	Monthly
Follow-ups: Number of individuals who received follow-up from alternative response team, including via phone or in-person, and the frequency of those follow-ups	Alternative response team case management system	Essential	Monthly
Service utilization: Number of clients referred to services that successfully access long-term support (e.g., substance treatment, housing)	Alternative response team case management system; Service recipient surveys, interviews, or focus groups	Supplemental	Monthly

Core Question: How are community members, some of whom are not directly served by alternative response, impacted by the program?

Metric	Common Data Sources	Priority	Review Frequency
Community awareness: Number of community members who have heard of the alternative response program and understand its offerings	Resident survey, interviews, or focus groups	Supplemental	Annually
Emergency services perception: Percentage of community members reporting feeling safe to call emergency services (e.g. 911, 988, alternative response hotline, etc.)	Resident survey, interviews, or focus groups	Supplemental	Annually

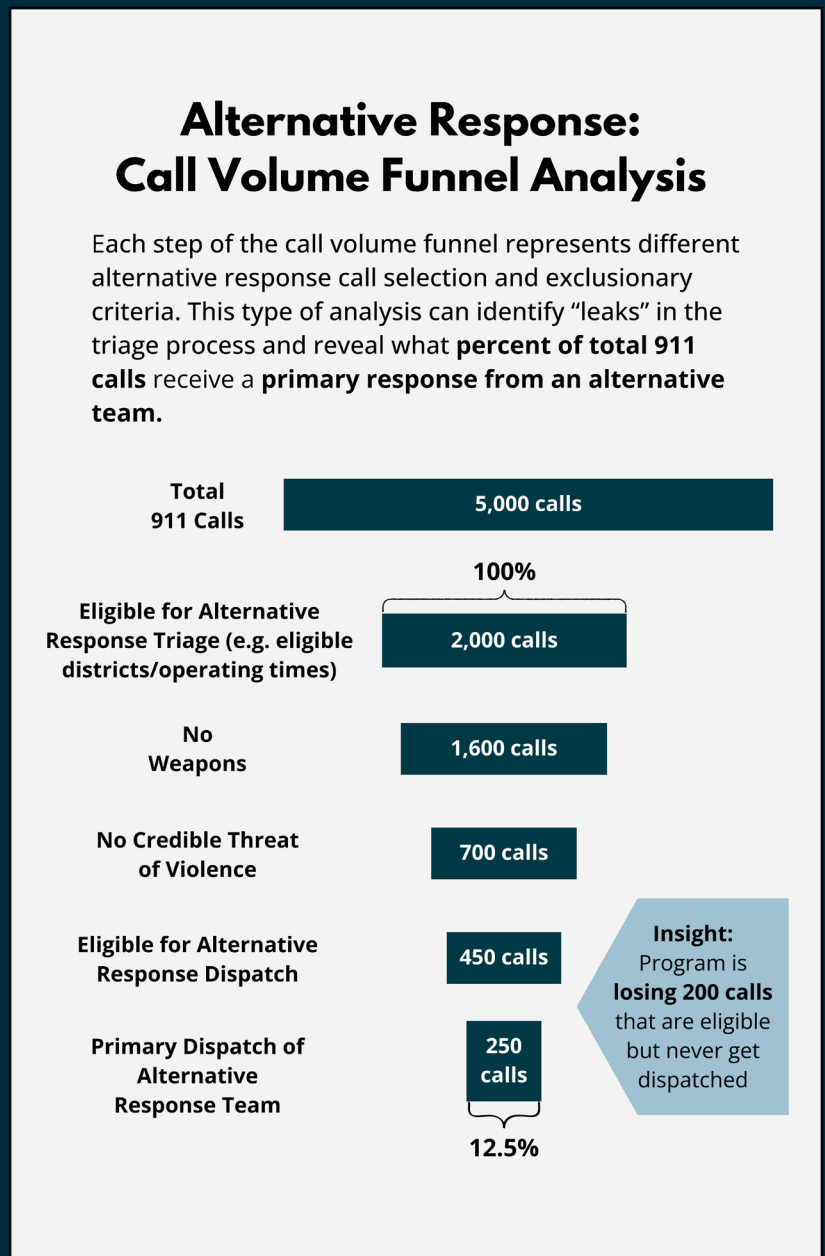
Data Analysis Examples from the Field

By tracking the metrics included in this tool, alternative emergency response programs are better equipped to conduct data analysis and generate insights to develop, improve, and expand their programs. Some [Alternative 911 Emergency Response Implementation Cohort](#) members have launched public-facing data dashboards that display many of the metrics included in this tool. Reporting program data publicly increases transparency and facilitates stronger community engagement, as community members can better understand the program's outcomes. Cohort members also use internal tables and charts to track and analyze these metrics.

Below are examples of data analyses from Cohort members. Each example reflects a different way that a jurisdiction used data to strengthen its alternative emergency response program.

Reactive troubleshooting: One method of data analysis for troubleshooting is a call volume funnel analysis, which involves analyzing data on how 911 calls are coded and triaged to alternative response teams. Such an analysis can reveal where there might be “leaks” in the funnel.

Are certain exclusionary criteria, such as a credible threat of violence, filtering out a large percentage of calls that are eligible for alternative response triage? What percentage of calls eligible for alternative response dispatch result in the primary dispatch of the alternative response team? Answers to these questions can allow alternative response teams to identify challenges in real-time and quickly respond to them. The graphic to the right shows an example of this type of analysis.



Tracking impact and managing performance: In the examples below, internal charts and graphs track specific metrics related to two different program goals: providing connections to mental health resources and reducing the deployment of law enforcement for mental/behavioral health calls. Each example includes a list of key performance metrics, a statement of what the program expects to see if it is meeting its goal, and annotations that identify trends. Understanding these trends can help programs identify performance challenges and refine practices over time.

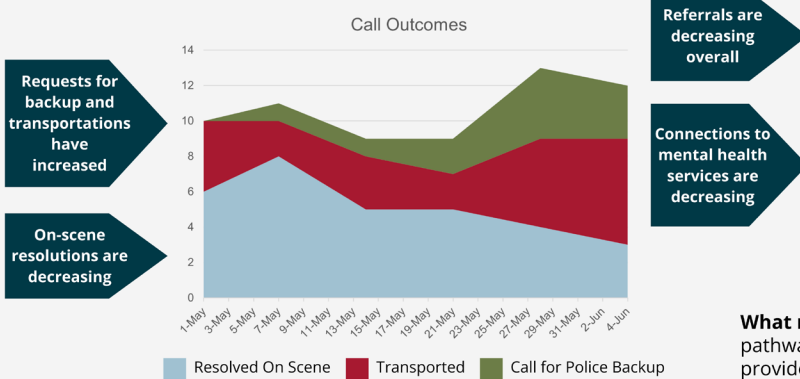
Goal: Provide connections to mental health resources

Key Performance Metrics

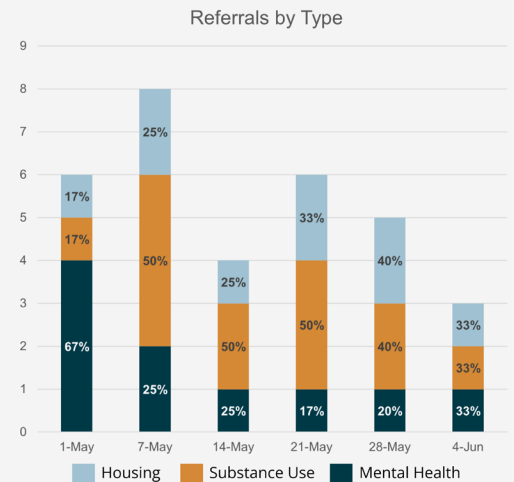
- **Call outcome:** Number of calls by call outcome (e.g. resolved on scene, call for police backup)
- **Referral types:** Number of calls resulting in referrals to resources, by resource type (e.g. mental health, housing)

What do we expect the data to look like? Most of our outcomes should show that calls are resolved on scene and that those with an identified need are connected to services

What proportion of calls are resolved on-scene over time?



What proportion of referrals provided are for mental health resources?



What next? Based on this data, the program could review referral pathways to understand if relationships with partner service providers might need to be strengthened or created.

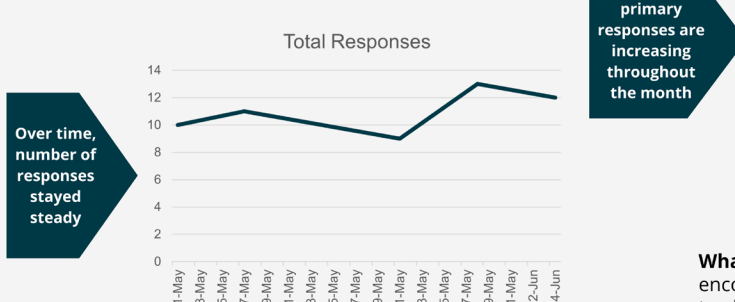
Goal: Reduce the deployment of law enforcement for mental/behavioral health calls

Key Performance Metrics

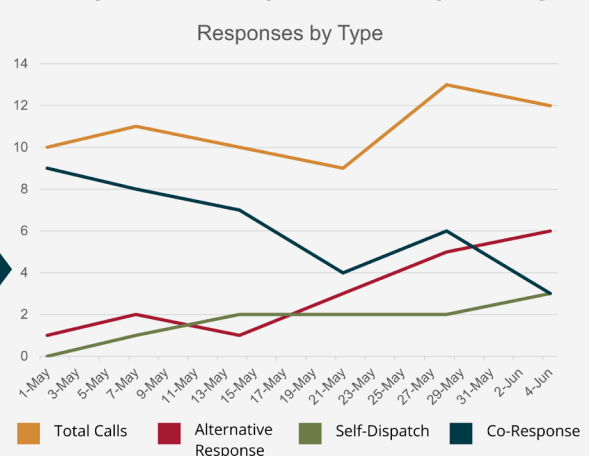
- **Call volume:** Number of calls taken by alternative team
- **Response type:** Number of calls alternative team responded to, by response type (primary response, co-response, etc.)

What do we expect the data to look like? Trending up over time
What type of response do we expect to provide? Primary alternative response with some self-dispatch and co-response

How many calls did we respond to over the month?



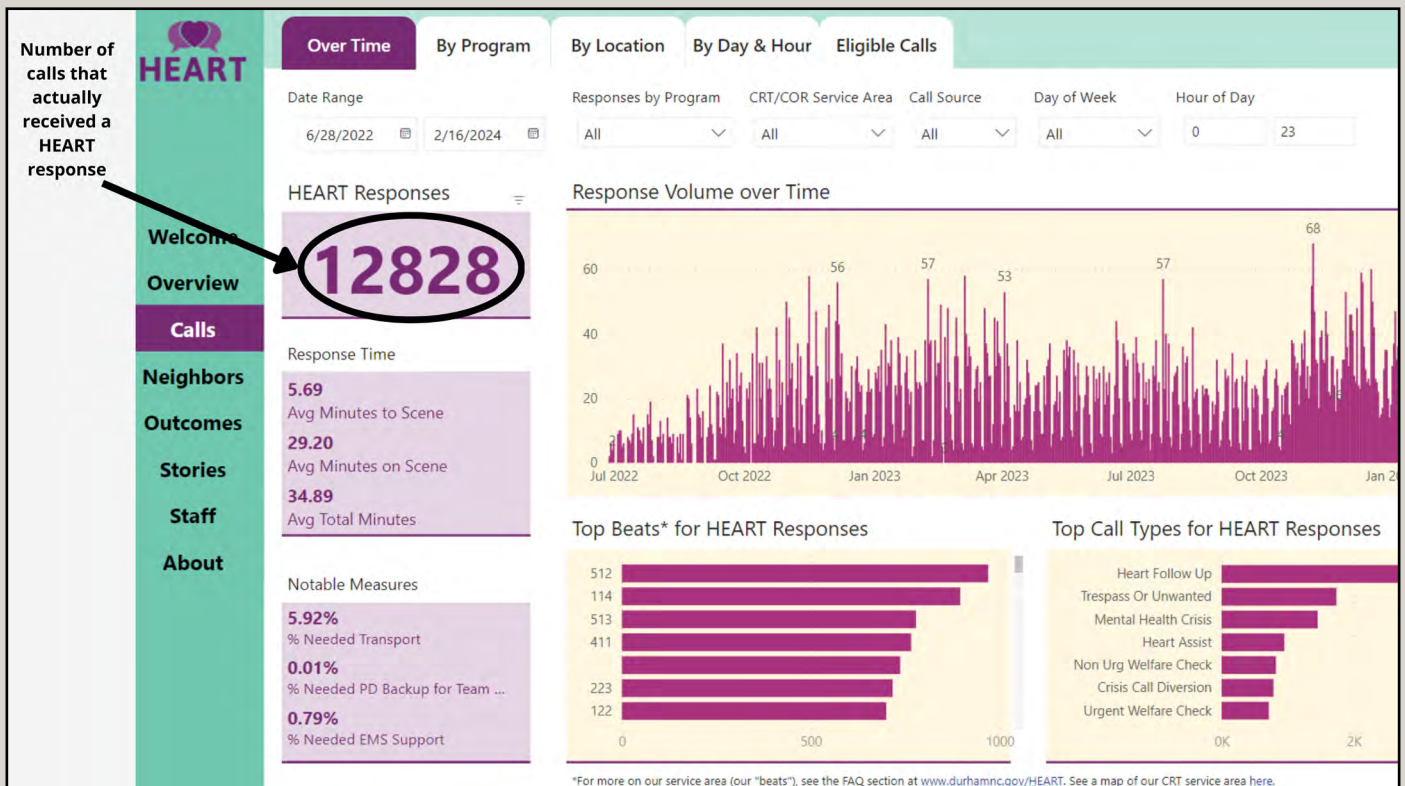
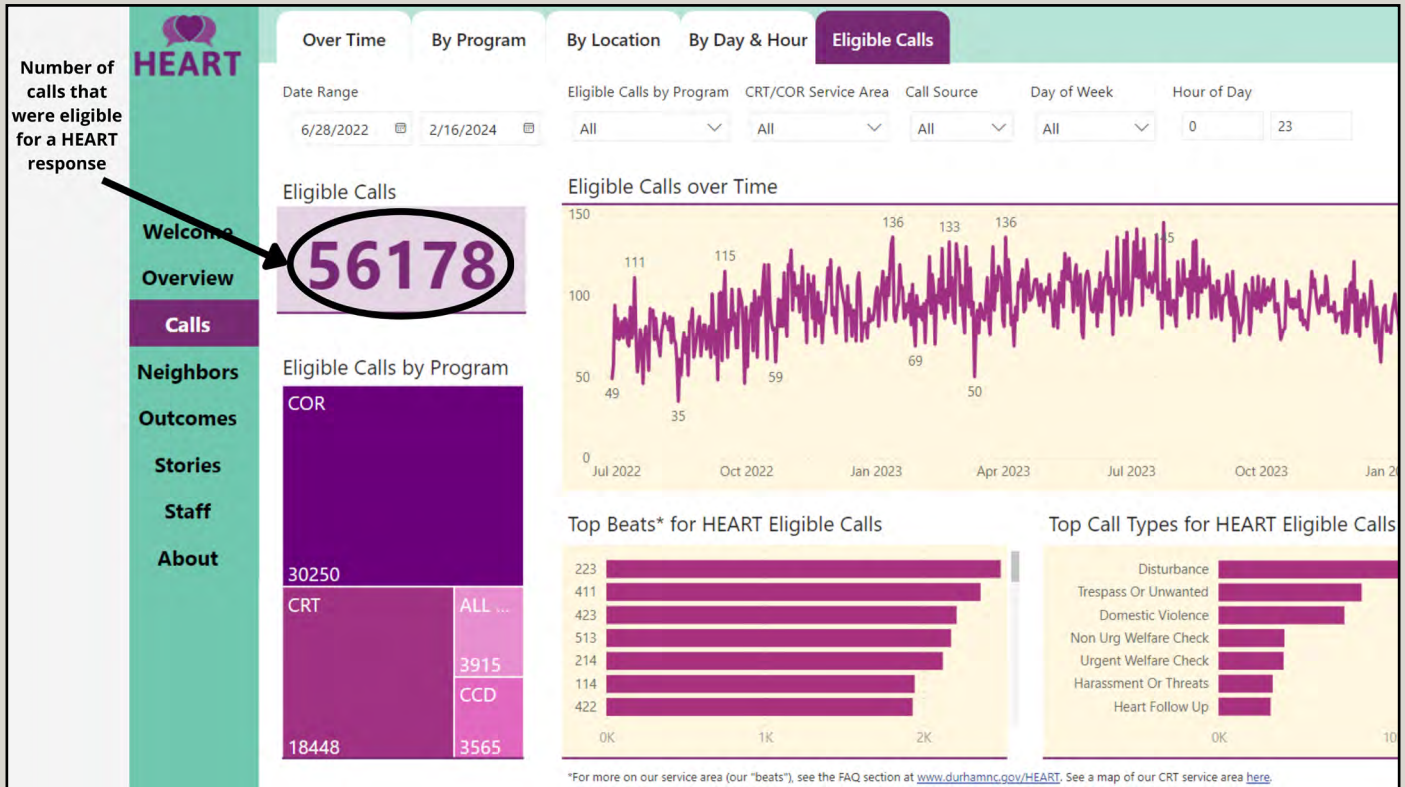
Which service (primary alternative response, co-response, self-dispatch) are we providing?



What next? Based on this data, the program could continue to encourage 911 to dispatch the alternative team as primary responders to eligible call types or set a benchmark for the proportion of calls that should be sent as an alternative response.

Note: This data has been modified for privacy purposes. Graphics are representative of the types of tools Cohort jurisdictions use.

Expansion and sustainability: In Durham, NC, the Holistic Empathetic Assistance Response Team (HEART) program manages an [online dashboard](#) with data on calls, service recipients, service outcomes, program staff, and narrative stories of impact. This dashboard includes data on both the total number of HEART team responses and the total number of calls that were eligible for a response from the HEART team. For example, from June 2022 to February 2024, roughly 56,000 calls were eligible for a HEART response, and the HEART team responded to almost 13,000 calls. Tracking the gap between the number of calls a program is currently able to respond to versus the total number of calls they are eligible to respond to can facilitate more informed conversations about program expansion and sustainability, such as expanding geographically, increasing operating hours, and increasing the number of alternative response staff.



To learn more about the GPL's Alternative 911 Emergency Response work and research, [visit our website](#). For governments exploring, planning, implementing, or expanding alternative 911 emergency response teams, sign up for the GPL's [Alternative 911 Emergency Response Community of Practice](#). Designed exclusively for government staff, the community of practice provides representatives from over 80 governments across the country with practical tools and actionable insights emerging from the GPL's work. The community of practice convenes monthly, providing a space for participants to engage with government peers on topics like stakeholder collaboration, community outreach, outcomes tracking, and more.

The [Government Performance Lab](#), housed at the Taubman Center for State and Local Government at the Harvard Kennedy School, conducts research on how governments can improve the results they achieve for their citizens. An important part of this research model involves providing hands-on technical assistance to state and local governments. Through this involvement, we gain insights into the barriers that governments face and the solutions that can overcome these barriers. By engaging current students and recent graduates in this effort, we are also able to provide experiential learning.

© Copyright 2024 Harvard Kennedy School Government Performance Lab

Designed by Emily Audet; figures by Analisa Sorrells unless otherwise noted