Police Response to Homelessness in Los Angeles:

An Evaluation Design

Pols 369 - Public Policy Analysis - Emory University

Selah Curran-Blakely, Jacob Lapp, Lisbeth Vargas

Introduction, Problem, and Theory of Change

Whether it is being arrested, being convicted of a crime, being imprisoned, or even being killed, people experiencing homelessness (PEH) are too often met with aggressive and violent responses from police. This dilemma is a consequence of many systematic policy, law, and social issues both nationally and locally, and is especially a result of law enforcement's inadequate training and experience with appropriately addressing emergent and non-emergent situations that involve this population. More importantly, PEH are subject to substantial criminal justice system involvement at alarmingly high rates and individuals experiencing mental illness are 40 times more likely to experience homelessness compared to the general population. Studies have found that the homeless mentally ill population are also 35 times more likely to be subject to criminal offenses than those in the domiciled mentally ill population. (Martell, D A et al.,1995) Additionally, research shows that homeless persons with serious mental illness experience between 62.9% and 90.0% rates of arrests, between 28.1% and 80.0% rates of conviction of a crime, and between 48.0% and 67.0% rates of imprisonment. (Canavan R, et al., 2012)

Historically, law enforcement hasn't been well equipped to address underlying causes of homelessness like mental health, especially behavioral health needs of

homeless populations across the country), as the default response for police is aggression and arrests. The Los Angeles Police Department receives 140,000 calls related to homelessness each year. (Sinning, 2021) Homeless populations both in LA and various cities across the United States are rarely given appropriate referrals or resources or sent to places that can provide them with such, like homeless shelters. The solution to this public issue we are seeking to evaluate is the implementation of Crisis and Incident Response through Community-Led Engagement (CIRCLE) program that sends outreach workers and mental health professionals to respond to non-emergency calls related to homelessness to LA communities.

This public issue has striked civilians, researchers, policy makers, and local authorities in both small and large cities with alarming and high levels of homelessness issues. The city of Pittsburgh aimed to address the issue of aggressive and violent police responses to non-emergent and emergent situations regarding PEH by creating the The Homeless Outreach Coordinating Committee (HOCC). For context, individuals living on the street represent less than 10% of the total homeless population in Pittsburgh. (PGH Homeless Outreach Coordinating Committee) According to the HOCC website, this population usually consists of single adults struggling with chronic illness such as addiction to drugs or alcohol, serious mental disabilities, or both, and most PEH in Pittsburgh are living in shelters or doubling up with families and friends. Additionally, each night in Pittsburgh, it is estimated that there are more than 2,000 PEH. (PGH Homeless Outreach Coordinating Committee) This alarming fact serves as a basis of the HOCC as the committee knows that this population of individuals can benefit from the homeless support services in which the committee's organizations provide. The HOCC's

mission is to serve as a consultation and support team for homeless outreach case managers, and it aims to educate officers on how to treat those PEH with mental health issues. The HOCC is composed of homeless service providers, business representatives, mental health and D&A professionals, and partnered with Carnegie Mellon University to create an app called BigBurgh.com. This app guides police officers and other community providers in linking PEH to a variety of resources like medical centers, food banks, shelters and more.

Not only has this public issue influenced the creation of committees like HOCC, but it has also intrigued many researchers who are interested in determining potential solutions to this issue, as well. In 2019, a study interested in identifying interactions between police and people experiencing homelessness and mental illness was conducted to explore whether housing status is associated with such police interactions. (Kouyoumdjian, et al., 2019) The researchers used the fact that PEH and mental illness tend to have complex care needs and face substantial barriers to accessing social and health services, as a basis for exploring their research question, evaluating their hypothesis, and conducting their study. They decided to explore both the individual-level factors and structural-level factors that affect access to social and health services in order to answer the question of whether housing status is associated with police interactions. These factors included challenging life circumstances, substance use, morbidity, and unwillingness to engage with offered services, lack of health insurance coverage, prejudice and discrimination of service providers, lack of appropriate services, and a lack of coordination and collaboration between mental health, social welfare, and homeless services. These factors determined how the researcher's collected their

findings and the study found that police interactions with people experiencing homelessness and mental illness in Toronto are common and that access to stable housing and changes in policy and practice could (1) decrease harms and (2) increase health benefits associated for individuals within this population. (Kouyoumdjian, et al., 2019)

The use of individual-level and structural-level factors in this study to investigate police interactions with PEH is crucial in determining how policy makers and authorities within cities should address issues that face their homeless populations. The combination of the Toronto study's findings and the HOCC's mission of equipping homeless service providers with the necessary tools to address complex issues and challenges faced by PEH in Pittsburgh help present the severe public need of solutions to this issue and show the extent to which social, political, and legislative changes (both federal and local) can help reduce negative and violent police interactions that PEH experience at high levels. Similar to the goals of the Toronto study and initiatives and mission of the Pittsburgh HOCC, we are interested in finding potential solutions to the overarching public issues affecting homeless communities across the country. However, we are particularly interested in evaluating how CIRCLE will alleviate and reduce the amount of aggressive police interactions among homeless populations in LA. If this program proves to be successful in its goals, we believe the implementation of it in other cities with homeless populations experiencing similar issues will serve as an effective solution to public issues surrounding people experiencing homelessness and mental health issues. PEH deserve to be met with resourceful, appropriate, non-aggressive, and de-escalated police interactions, as national statistics and research show how both

historically and currently this has not been the case. We believe that implementation of programs like CIRCLE and the creation of committees like HOCC will help resolve and combat the systematic issues homeless populations across the nation experience when interacting with police.

The theory of change we are using to show how the implementation of CIRCLE will address the problem in which we are studying is *does the implementation of CIRCLE (the proposed unarmed crisis response program) affect the levels of violent and aggressive police interactions with homeless people in LA?* By deploying proactive crisis response teams into each community, we believe that the implementation of this program over time will reduce levels of violent police interactions to nonviolent 911 calls made against homeless individuals within Venice, Hollywood, and South LA. Because the CIRCLE teams aim to de-escalate these situations and create referrals to local service providers, we intend the program to lead to increases in safe police interactions and responses within the above-mentioned populations of homeless individuals.

Evaluation Questions

The key evaluation questions we are aiming to address in this evaluation include (1) What is the scope of the homelessness problem in LA, and what is law enforcement's role in responding to it? and (2) Do unarmed police officers and the implementation of de-escalating and safe police response programs such as CIRCLE improve the quality of interactions and services for homeless populations in LA? We determined these particular evaluation questions based on the severe need for safer police responses to

non-violent 911 calls made against homeless individuals in LA. We particularly chose to evaluate the impact and implementation of the CIRCLE program in Venice, Hollywood, and South LA because they are the three neighborhoods in LA with the highest concentration of PEH and with the highest volume of calls for law enforcement service related to PEH. Because these areas have homeless populations who see the most aggressive responses from police to nonviolent 911 calls compared to other parts of LA, implementing this program within these particular locations is most effective in our evaluation of how well the impact of its implementation addresses the program's primary goals and objectives.

Evaluation Design Overview

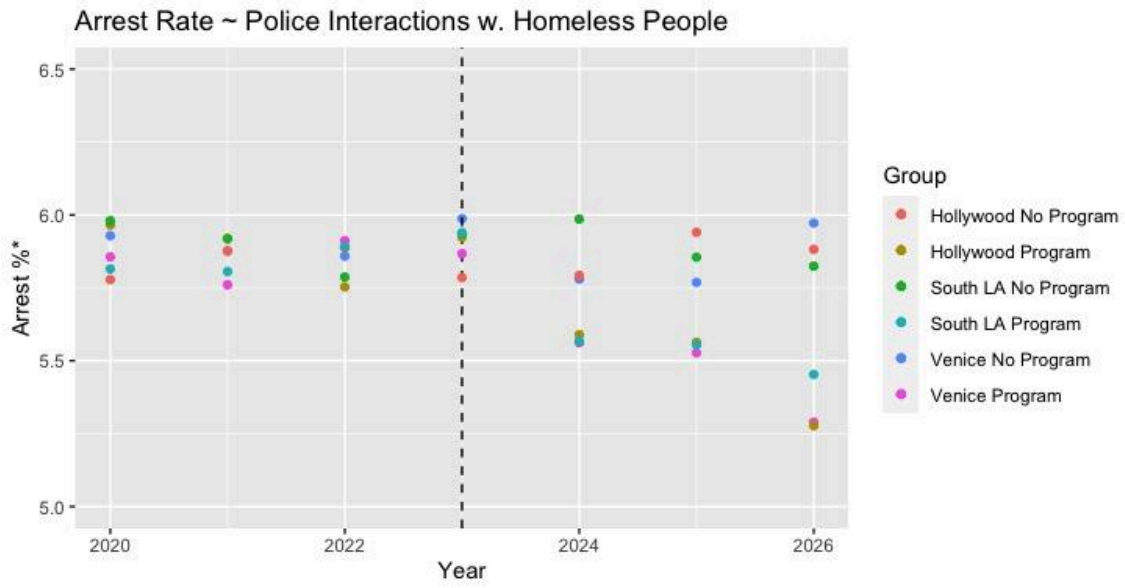
Below we will thoroughly discuss our evaluation design in detail but we will first provide a summary of the design. We will conduct a Comparative Interrupted Time Series Analysis (CITS) where the independent variable we will be using to measure our findings is whether CIRCLE program teams are sent to respond to non-emergency 911 calls regarding PEH in Venice, Hollywood, and South LA, and where our dependent variable will be the Shelter admit/ %, Arrest # / %, Fatal Interaction # / %, Hospitalization # / %, Referral to local service provider # / %, and No response Interaction # / %. We will then conduct an impact assessment to address the above-mentioned evaluation questions of our study and to effectively determine and evaluate the impact of CIRCLE in LA communities with high rates of violent police interactions among PEH.

Evaluation Design

The evaluation design presented in this potential study is a comparative time series analysis (CITS). The independent variable in this study will be whether police units utilize CIRCLE program teams to respond to non-emergency calls about homeless people. This design utilizes a variety of dependent variables to assess the outcomes of these encounters, and thus the effectiveness of the CIRCLE program. Outcomes measured in this design are the number of homeless people admitted to homeless shelters, arrested by the police, hospitalized, referred to a local service provider, involved in a fatal incident, or did not receive a response upon non-emergency interactions with police. These outcome measures are critical to the evaluation design as they encompass essentially all possible results of encounters with the police. Both the discrete counts and the proportion of the outcomes realized will be measured during analysis.

The time period for the comparative interrupted time series analysis is from 2020 to 2026. From 2020 to 2023, data will be collected weekly from all police departments. None of the departments will have implemented CIRCLE from 2020 to 2022. In 2023, the program will be implemented and will collect data from department units both those who used CIRCLE and those who did not. Furthermore, the units of analysis are three cities in the Los Angeles metropolitan area, California. The three cities incorporated in this study are Venice, CA, Hollywood, CA, and South Los Angeles, CA. These cities were chosen because of their respective homeless populations – South Los Angeles has a higher propensity, while Venice and Hollywood have lower rates. However, these three cities are all within close proximity of each other and satisfy many assumptions about

appropriate comparisons. While the unit of analysis is the city itself, each city's police department will be divided into treatment and control groups. The groups will be assigned randomly via the distribution of coded incidence reports–similar to the strategy employed in the Minneapolis Domestic Violence Experiment. The treatment group will be the subset of each police department that had the CIRCLE program implemented. The control group will be the subset of each police department that did not have the CIRCLE program implemented. Thus, post-intervention, there will be six data points per week (3 cities * two groups). To assist in visualizing this design, below is a chart with simulated data:



Note that the chart above uses only randomized data and is solely used to aid in visualizing the design. Additionally, in between the data points for each year, the evaluation design will contain data points for every week, but for clarity and to avoid clutter, this chart just contains yearly simulated data points.

We anticipate there to be a rich sample size of interactions to conduct our analysis. For example, "Every year, the Los Angeles Police Department receives

140,000 calls related to homelessness — roughly one call every four minutes (Carpenter).” However, this study would focus on only nonviolent police callings regardless of people, as to narrow the scope and specify the causal mechanism. Furthermore, all homeless people who were involved in called-in nonviolent incidents within the city borders of Venice, South Los Angeles, and Hollywood are considered. Yet, this large sample size relies on collaboration from both members of each police department and the CIRCLE team.

Data will be collected from each incident. Said data will include incident reports and surveys from homeless individuals and referred caretakers, if applicable. The aforementioned reports and surveys should be administered and completed continuously within police departments and CIRCLE throughout the duration of the study. Consistent weekly police report submissions will be required, as will survey results of homeless people via interviews and surveys conducted by CIRCLE. The questions asked to homeless people by CIRCLE will resemble the following: “Have you had previous encounters with the police?”, “How do you feel the police responded to your situation?” Surveys of CIRCLE members familiar with the specific instances are also required and will ask similar, if not identical, questions to confirm valid answers. The outcomes of this study, nonviolent homeless interactions resulting in admittance to shelter, arrest, fatality, hospitalization, a referral to a local service provider, or no response, will be summarized by age, gender, and race.

Analyzing data collected from the aforementioned evaluation design serves as an impact assessment to address the evaluation questions stated previously. The Comparative Interrupted Time Series Analysis design is not only robust in establishing

causality, but also in its interpretability. There are several methods that will determine the effectiveness of the CIRCLE program in Los Angeles. The first of these methods is calculating the average treatment effect (ATE) per city. For example, the ATE for arrest rates in South Los Angeles is the mean difference between arrest occurrence within the control group in the South Los Angeles Police Department and the arrest occurrence within the police group with the CIRCLE program. The ATE at a city level enables researchers to calculate the specific treatment effect per said city, by outcome. Furthermore, the ATE will be calculated in aggregate for all three cities considered. Algebraically, this ATE will be represented as:

$$E[Y_1 \mid \textit{Cities w/Program}] - E[Y_0 \mid \textit{Cities w/o Program}]$$

Thus, an aggregate estimate for each indicator and outcome in Los Angeles will be tangible. Treatment effects for larger municipalities are desired to generalize and understand macro-level phenomena. Additionally to estimate treatment effects, the change in slope of the treatment and control groups, i.e., $\Delta\ \beta$. These treatment effects are calculable through elementary t-tests, i.e.:

$$\Delta\ t = (\beta_1 / s_1) - (\beta_0 / s_0)$$

In essence, this estimate captures the difference in slopes between pre-and post-treatment of treated and control groups. Treatment groups will likely have a smaller change in β compared to the treatment groups, who likely will experience a significant change in β as a result of program implementation.

Statistical Conclusion Validity

Given the objectives of the RFP and this subsequent proposal, it is important to

consider this evaluation design in the context of the threats to validity framework. The RFP asks that we "assess the range of practices […] used by police to respond to homelessness." A proper assessment, therefore, must rely on firm statistical power—concerning the ability to draw conclusions regarding the relationships between a program and its effects (Rossi). Here, it is important to avoid a small sample size as it increases the likelihood of Type II error where evaluators are prone to an incorrect conclusion about the significance of the relationship between the treatment and the outcome (Rossi). This evaluation is designed to avoid this threat by, in theory, equipping a large sample size. As reported by the Mayor of Los Angeles, the LAPD receives about 140,000 calls related to homelessness per year (Carpenter). With most of these calls about nonviolent incidents, we assume that the study would be conducted on a sample size in the tens of thousands. In addition to the large sample size, the sub-aggregate analyses for this design seek to analyze data by sex, race, and age—ensuring that our sample estimates are representative of the greater population as possible. A firm sample size, however, relies on collaboration from the Police Department, the CIRCLE programmers, and previous data. Given the sensitivity of the topic, we expect minimal pre-existing data for certain measures (such as shelter data). We aim to combat this by selecting measures for which there would be strict data reports (such as hospitalizations), as well as conducting the analysis over time to ensure adequate data.

Our ability to draw conclusions is further threatened by the reliability of measures and of treatment implementation. To start, measures of low reliability do not possess the quality or strength required to feasibly draw causal conclusions about a program as they inflate the standard errors of estimates (Rossi). Each measure in this

design was carefully selected to encompass the possible outcomes of police encounters with homeless individuals: admittance to homeless shelters, arrests, hospitalizations, referral to a local service provider, fatal result, non-response scenario. While this may not be all-encompassing, these outcomes occur with the highest proportions and intercorrelations. Furthermore, it is suggested to conduct more aggregated units of measurement when the relatability of measures is a concern—which will be done via the sub-aggregate analyses of sex, race, and age. The largest concern for statistical conclusion validity stems from the reliability of treatment implementation. We are to expect variance across officers and departments, as well as within individuals, due to the nature of the treatment. As variance can decrease the chance of obtaining true differences, we seek to minimize the variance via standardized training—which is required of CIRCLE participants. In regard to the police department, the variance is an outcome of interest as we hope to observe outcomes representative of the pre-intervention outcomes. Moreover, variance is a strength for our chosen statistical analysis—a Comparative Interrupted Time Series. Given this, and the use of robust statistical analyses, we can be confident in the statistical power of the design and, therefore, our ability to draw conclusions.

Internal Validity

After establishing this ability to draw conclusions via statistical mediums, we must consider whether relationships between the treatment and outcome are causal through the internal validity framework. The questions asked by the RFP and within the evaluation design itself seek to establish a causal relationship between the

implementation of CIRCLE and the outcome of a police interaction with a homeless individual. Concerns of internal validity pose the biggest threat to the sanctity of this design's results. Specifically, issues of history, maturation, and their interaction with selection pose a particular threat. History poses a threat when the observed effect is attributable to an event that is not the implementation of CIRCLE. This is considerable given that the issue of homelessness is prevalent in public policy and we are to expect events that coincide with the time frame for the implementation of CIRCLE. However, the CIRCLE program is the first of its kind in Los Angeles and is receiving particular funding and attention from the Los Angeles government. Since the biggest threat to history would be a rival program or resources, we can assume that the program would generally be unaffected by events regarding history. Maturation specifically concerns the population of interest and the potential for the observed effect to be attributed to an individual's becoming more experienced (Rossi). This is a particular concern for the surveying aspect of the programming—where encountering CIRCLE on multiple occasions may influence their responses to a question such as "How do you feel the police responded to your situation?" In the hopes of mitigating this threat, we would also require that a member of the program ask: "Have you had previous encounters with the police?" We expect negative sentiments typical of police interactions to cloud the responses to these questions, and consequently, would primarily use the survey responses as a supplement to our other data.

Both history and maturation are particularly relevant in regard to their interaction with selection. Selection poses a threat when an effect might be due to the kinds of individuals in one experimental group as opposed to another. For example, when

speaking about a threat to history, it is possible that an event or policy is enacted to specifically target the homeless population in South Los Angeles but not in Venice. Another important conservation is that about the unpredictability of the issue. Homelessness has historically been a difficult public problem for which to properly implement a program and even more, to measure its results. When we consider the unpredictability of the scenarios, it is plausible that we encounter outcome measures we did not originally account for or that although we used random assignment, one group could be involved in more violent scenarios on average. This unpredictability underlies the internal validity of the design. To mitigate all the variation discussed above, we seek to exploit variation and these unpredictable events within our evaluation design through a Comparative Interrupted Time Series analysis. The primary purpose of a CITS analysis is to account for variance and existing, pre-intervention differences between the treatment and control groups (Rossi). Here, we exploit the lack of homogeneity between groups via a statistical analysis and counteract the potential differences in history and maturation within the selection of both groups. Careful selection as it pertains to the selection of our sites, and the random assignment of the treatment, work to reaffirm the strength of the analysis and its ability to account for variation. More specifically, each site—Venice, Hollywood, and South Los Angeles—was chosen for the sake of variance as each city differs in their infrastructure and the resources they have available to homeless individuals. In other words, while variance and unreliability pose the biggest threat to the internal validity of the design, they also serve as one of the strengths for a CITS—allowing us to account for the variance in any causal conclusion we might draw.

Construct Validity

Construct validity refers to the suitability of our measures in relation to our outcome of interest (Rossi). By seeking to measure the impact of CIRCLE on the quality of police interactions with homeless individuals, we must be careful in choosing measures that can adequately quantify an intangible outcome of interest. An inadequate pre-operational explication of constructs, then, serves as the biggest threat to the construct validity of the design. Each measure was chosen due to their prevalence as outcomes in police interactions, and justifiably can be used to measure the quality of police interactions: admittance to homeless shelters, arrests, hospitalizations, referral to a local service provider, fatal result, non-response scenario. In selecting these measures, we were mindful to create a spectrum of outcomes as opposed to focusing only on the extremes. We aimed to be as encompassing as possible while still allowing room for outcomes that we would likely observe in a non-experimental setting. This does raise a concern, however, as we face nuance with certain measures. For example, given that it is difficult to quality distress, we are confining many scenarios to a binary measure. While this strengthens our ability to draw statistical conclusions, we must acknowledge that not every arrest or hospitalization will look the same. Ideally, these discussions would be brought to light via supplemental data analyses like the use of surveys and sub-aggregate analysis by relevant characteristics (i.e., race).

Establishing this construct is especially necessary when the outcome of interest is an intangible measure such as quality of interactions, as it allows for the results of the study to be grounded in a firm analysis of essential measures. Following the discussion above, a secondary concern with the construct validity is the generalizability across

constructs. As we cannot say that all arrests or shelter admittances are the same, looking at the binary data itself may not provide an adequate picture of the problem holistically. For this reason, we aim to use statistical analyses to determine the significance of these binary measures—which would serve as a launching pad for more in-depth understanding of the measures as they would appear in a non-experimental scenario. Similarly, the use of sub-aggregate analyses aims to strengthen and inform our chosen outcome measures by accounting for potential confounding variables. Presumably, given our understanding of the issue, race, sex, and age would result in differences among the interactions with police for homeless individuals. Including these measures in our construct work to make our theoretical concepts of interest representative of the issue as it exists in the real world—thereby strengthening the fit between our measures and outcome of interest.

External Validity

Following internal validity, threats to external validity are particularly relevant as they concern our ability to draw generalizations concerning the causal relationship in a study. In addition to requesting an assessment of the range of strategies used by police to respond to homelessness, the RFP lists the motivation as wanting to "inform [future] practices, strategies, and tactics used by police to respond to homelessness." Therefore, the design prioritizes the ability to generalize the results of the study across and within populations of homeless individuals. The former is accomplished by the use of multiple sites with different characteristics. Venice, Hollywood, and South Los Angeles hold the largest populations of homeless individuals in Los Angeles County. Each city differs

primarily in the resources they offer homeless individuals, and their infrastructure or type of city. With Hollywood and South Los Angeles being inner-city cities, they are home to the largest homeless shelters in Los Angeles. Venice, as a beach-bordering city, has offered less resources historically but has seen the largest increases in concentration of homeless individuals in the last few years. This allows our ability to generalize across populations of homeless individuals, leaving generalizations within homeless populations to aggregations within each city by the following characteristics: sex, race, age. As each of these characteristics pertains to a relevant discussion about policing and homelessness, it is important that we seek to understand the problem through the lens of each. With this, we strengthen our ability to generalize about the results of our study—and properly address the motivations behind the RFP.

We must consider, however, that we are limited in our applicability nationwide as all sites are based in Los Angeles, California. Even with the generalizations we are able to make, we cannot say that all populations of homeless individuals are the same. Similarly, the recency of data may not provide the most comprehensive understanding of homelessness throughout time. Between 2010 and 2020 alone, there was a 31% increase in the California homeless population (HUD). For this reason, we equip a Comparative Interrupted Time Series Analysis as it accounts for issues of the interaction between history and treatment by adding multiple pre- and post- intervention observations and analyses (Rossi). This helps to address an important concern with the external validity of the design: Are we to expect the same conditions years from now given that the problem is evolving at a rapid pace? By frequently collecting data at many time points, and meticulously including data pre-intervention, we can garner a better sense of the issue in

a way that is comprehensive of its evolution. We are, however, still left with the concern surrounding the applicability of the results: Are we to expect the same results in cities outside of Los Angeles? The CITS design and selection of sites effectively maximize the generalizations we are able to make by creating nonequivalent comparison groups over the same period. However, when addressing a public problem and dealing with a policy intervention that is likely to influence the lives of many, it is important to be cautious in drawing conclusions. For this reason, we aim to use the design as a launching pad to address the RFP by working to inform future practices employed by the police when responding to homelessness.

References

Canavan R, Barry MM, Matanov A, et al. 2012. Service provision and barriers to care for homeless people with mental health problems across 14 European capital cities. *BMC Health Serv Res*.

Carpenter, Susan. 2021. "CIRCLE 911 homelessness." Spectrum News. https://spectrumnews1.com/ca/la-west/public-safety/2021/11/23/city-of-la-launches-circle-program-to-divert-911-calls-about-homelessness.

Kouyoumdjian, Fiona G et al. 2019. "Interactions between Police and Persons Who Experience Homelessness and Mental Illness in Toronto, Canada: Findings from a Prospective Study." Canadian journal of psychiatry.

Martell, D A, et al. 1995."Base-rate estimates of criminal behavior by homeless mentally ill persons in New York City." Psychiatric services (Washington, D.C.) vol. 46,6

PGH Homeless Outreach Coordinating Committee. PghFree.net. http://www.hocc.pghfree.net/Mission.asp.

Rossi et al, *Evaluation: A Systematic Approach*

Roy, Laurence, et al. 2014. "Criminal behavior and victimization among homeless individuals with severe mental illness: a systematic review." Psychiatr Serv.

Sinning, Sarah. 2021. "L.A. Announces Unarmed Crisis Response Program for Those Experiencing Homelessness." Police1.

https://www.police1.com/california/articles/la-announces-unarmed-crisis-response-program-for-those-experiencing-homelessness-DM2W2Doaxl9HKsfe/.