POLICE SURVEY ON VIOLENT CRIME DATA IN HAWAI`I
SUMMARY OF RESULTS

Submitted to the Gun Violence and Violent Crimes Commission, State of Hawai`i, Department of the Attorney General

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Background

The Gun Violence and Violent Crimes Commission (GVVCC) was established to address gun violence and violent crimes by "providing coordination, facilitation, and planning among state and county agencies, federal agencies, and other partners as appropriate to carry out its purpose. The GVVCC shall endeavor to: (1) Identify relevant data that may be used to reduce gun violence and violent crimes; (2) Identify areas in which relevant data is not available; (3) Maximize the sharing between the agencies represented on the commission and other appropriate stakeholders of data relevant to reducing gun violence and violent crimes; and (4) Coordinate and conduct research on gun violence and violent crimes." As part of the GVVCC, a permitted interaction group was established to look at data sources in the state (hereinafter referred to as "data group"). The data group is chaired by the director of the Criminal

Justice Research Institute (CJRI), which is engaged in statewide efforts to map data as part of their statutory responsibilities and is a separate effort from the GVVCC (HRS 614). Because the CJRI is conducting similar work to understand data sources for statewide research purposes, the CJRI's staff developed and administered a survey on arrest data across all four county police departments. With the CJRI's prior data mapping work, they found that arrest data was one of the most valuable sources for statewide research due to existing technology infrastructure to aggregate and centralize information about crimes, However, they also found in their review of criminal justice data sources that data dictionaries and data definitions did not exist for most of the state's criminal justice information systems. It is important to fill in these gaps to understand how information from a case management or operational system like an arrest records system can be transformed into data for reporting on crime rates. In order for the GVVCC to study and report out on violent crimes, it is essential to understand the operational nature of these systems to inform the strengths and limitations of data sources for research purposes.

In the State of Hawai`i, police departments are operated at the county level. Though crimes are defined under state statute (Hawai`i Revised Statutes), each police department has its own policies and procedures, and resources to carry out their duties. This includes how they arrest and report crimes, and the way in which information is collected and stored. As a result, different practices at the county level could impact data collection when it is aggregated at the state level. Each police department reports arrest data to statewide sources, though not all information from police department systems is shared with statewide databases. This includes arrest data that is submitted to the Hawai`i Criminal Justice Data Center (HCJDC) as part of the statewide criminal history record information system (CJIS), as well as the Crime Prevention & Justice Assistance Division, which reports out on state crime trends and operates the National Incident-Based Reporting System (NIBRS) program. Both of

these divisions are located in the Department of the Attorney General's office. While CJIS and NIBRS collect statewide data on crimes, including violent crimes, it is critical to understand how data is collected and measured by each police department in order to use the data from these two sources for studying violent crimes. It should be acknowledged that CJIS and NIBRS exist for different purposes, and have different policies and procedures for their crime data. This includes the way in which they collect police data and aggregate it for research and reporting.

Methods

Research staff at CJRI distributed a survey to all four county police departments to learn more about the process used to collect and report arrest data at the county and statewide levels. The survey was distributed in early 2023 to each police chief, which was then distributed to relevant staff in each department that may have had subject matter expertise on arrest data collection and reporting. Survey results were provided to CJRI research staff to review and summarize.

Survey responses were complied in narrative form to summarize the current data collection and reporting practices for arrest data in the state with specific attention focused on violent crimes. Results are discussed below to provide and overview of the different ways in which arrest information is stored by police departments in order to understand the strengths and limitations of using arrest data for research, particularly for studying violent crimes. CJRI research staff recommended actions to ensure more accurate and valid measures for violent crime should arrest data be used as a statewide source for violent crime reporting and research. Given the considerable resources devoted to aggregating arrest data at the statewide level, CJRI recommends starting with this course of data for violent crime research in the state of Hawai`i.

Survey Results Summary

The following section reviews the main findings from the survey and are organized to help the GVVCC understand the landscape for arrest data including the strengths and limitations for using this data for violent crime and gun violence research. While reviewing these results, it is important to acknowledge a few limitations in conducting surveys. First, it can be difficult to translate complex topics like information systems, databases, and criminal justice laws into written survey questions. There may be instances in which respondents interpreted questions differently based on their own perceptions or circumstances. For example, "database" might mean one thing in one police department and something entirely different in another, such as distinguishing between a records management system operated through software or an Excel spreadsheet that someone enters data into manually. Another limitation is that the answers refer to a certain point in time. Given that technology, laws, and operations change frequently some answers may not be applicable at a later date. Police departments had a chance to review the summary to ensure the CJRI interpreted responses correctly, therefore this summary should reflect the survey results accurately. However, some technical aspects of understanding arrest data might require further discussion with police departments directly. The purpose of this summary is to provide an overview of one main source of violent crime data for the state to consider when conducting research and reporting on the topic.

Data Collection on Arrest Records

The methods to collect data can impact data quality and the timeliness of data reporting. Each county has different resources and databases, and understanding the process by which data is entered is valuable for understanding limitations of data sources. For instance, directly inputting arrest data in the field by the arresting officer might increase data reliability and validity, where the officer can enter all information related to the arrest not long after the incident occurred whereas entering

information later might result in fewer details or missing information. However, having one person collect and enter police reports could improve the consistency of information for reporting purposes if they review and enter all reports for the agency. Data collection procedures must balance two goals, which is to ensure police departments have a functional *information* system in the field for them to do their job (which may include looking up agency records, documenting information for legal purposes, etc.) while also storing information that can be transformed for *data* reporting and analysis (i.e., metrics and statistics).

The survey found that arrest records, including information on violent arrests, are entered in the following way across departments in the state of Hawai`i:

- **Hawai`i** and **Honolulu** have systems set up that allow officers to input arrest data directly into their database while out in the field.
- **Kauai** completes a paper form in the field and a staff person at the station enters it into the database.
- **Maui** completes paper forms and reports on-site/duty, and are uploaded into the database after approval.

Police Department Ability to Report Out on Violent Crimes

Police departments may collect and report out on violent crimes for their own purposes. Depending on the way this information is stored and reported, it may be more accurate to work directly with police departments to collect and study violent crime if statewide systems do not aggregate the information on violent crimes in a way that is useful for GVVCC research. However, this may depend on their ability to extract and share data with others. Additionally, for some research it may be helpful to work directly with the local police department if some research or policy questions are unique to the jurisdiction.

The survey asked police departments about their ability to collect and report out on violent crime:

- All four police departments collect this information systematically in their electronic database and can report statistics on violent crime in some capacity.

Barriers to Reporting Out on Violent Crime

Though the prior question found all four departments could report out on violent crimes, there are likely varying degrees of how easily this information can be reported out or analyzed for metrics or research purposes. The ability to report out on statistics is dependent on the way in which databases are structured to capture information. Sometimes, information is stored in a way that is difficult to retrieve but with manual work (i.e., reading through paper files, it is possible to collect information for data analysis. Other times, information is stored in a way that it cannot be used for statistical analysis or may take some effort to transform into something that can be quantified. To illustrate these barriers, take for example a study on gang violence that might rely on arrest information. The police may not have a field or flag to track that specific information in their information or reporting system. As a result, researchers may need to read arrest reports to collect that information from a narrative or written description. However, sometimes information is missing because an agency does not collect it and it remains a gap. Take for example housing status, where police might not systematically collect that information on individuals they arrest because it is not relevant to their arrest procedures. If a significant amount of information is missing on an important variable, you cannot use it in certain statistical analyses and it will be limited in its use for other research.

To summarize, there are several reasons information is missing, or if

available, it is difficult to transform into data for statistics. Information systems and record keeping are one of the biggest barriers when conducting research in criminal justice: "data" is collected for operations, and not for research. It is important the police have an information system that is effective and efficient for carrying out their duties, however, information systems might not be designed to report out on data that can be analyzed with metrics and analysis very easily because of this.

The survey identified the following barriers for reporting information on violent crime, which overlapped to some degree across departments:

- Related to the arrest process itself, in which it is sometimes difficult for the police to obtain information about violent crime because of intimidation and retaliation (or fear of intimidation and retaliation) from suspects towards complainants and witnesses. In other words, the police may not be able to collect all of the information they need for the arrest report or other records related to violent crime(s) (i.e., some information may be missing).
- The lack of training and police officer consistency to define "violent crime."
- One department did not identify any barriers to reporting out on violent crimes.

Categories of Violent Crimes

There may be differences by departments when collecting information on the types of violent crimes or sub-categories of violent crimes. Crimes against persons or crimes that involve weapons can encompass a broader range of behaviors that may overlap with violent crime or be separate from what the GVVCC would study. Additionally, the GVVCC may want to have the ability to focus on specific sub-categories of violent crimes. Having the ability to specify these subtypes in data can be particularly helpful since

crime trends or effective policy solutions might differ from those related to the broader category of violent crime.

The survey found that police departments tracked information on sub-categories of violent crime in the following way:
- All departments tracked categories including domestic abuse (could include intimate partner, family, or others), physical assault, aggravated assault, sexual assault, and weapon present or used in commission of offense.
- **Hawai`i**, **Honolulu**, and **Maui** collected information on intimate partner violence.
- **Hawai`i** and **Kauai** tracked information on gang-related crimes.
- **Hawai`i**, **Honolulu**, and **Kauai** tracked crimes against persons.

Violent Crimes Involving Weapons Including Guns
Not all violent crimes involve weapons and not all crimes with weapons might be viewed as violent (i.e., unregistered weapon in home). Given the focus of the GVVCC, information on weapons may be needed. This may also include the ability to specify the type of weapon, in particular guns, used in violent crimes.

The survey asked police departments about the type of information they collected on weapons:
- Information on weapons is inputted into the database systematically for all four departments, but there is some variation by department in terms of reporting about weapons. For example, one department follows the NIBRS reporting for weapons and another department tracks a range of possible weapons categories. It is unclear how easily information about weapons could be reported from the police

department systems; police department staff or researchers may need to read the arrest report to get specific details about weapons and how they were used in the commission of a crime.

Defining Violent Crime

A challenge in conducting research and reporting out on crime relates to identifying data that provides an accurate and reliable representation of the criminal behavior (related to reliable and valid concepts in research methodology). There can be a disconnect between staff in the field and researchers in addition to the data sources used to collect and interpret them. For instance, sometimes the offense information at charging or in plea negotiations is not directly or clearly tied to the specific behavior. Additionally, it is complicated translating a behavior of a person to an arrest report with specific violations outlined in HRS, which is then turned into an offense category in a statistics or research report. For example, someone who assaulted a family member could be placed in many different categories in a research report, such as committing an assault, domestic abuse or violence incident, or intimate partner violence. For the prosecutor, there may be specific violations in HRS they use to charge the case and by the time the case is adjudicated, the violation from HRS might change into something else in the conviction record. Furthermore, not all domestic abuse incidents are intimate partner violence, and some researchers may not even categorize them under the broader definition of violent crime (say for example, if a researcher was focused on gun violence occurring in urban areas). To summarize, it can be difficult to use legal definitions for understanding behavior, and this ignores another complication in which many individuals engage in a range of offenses that they might get arrested or charged for at one time. Using administrative data to describe human behavior is challenging when conducting research.

Despite the limitations of administrative data sources, developing definitions on behaviors and identifying common practices for using administrative data can aid in translating data into generalizable research. This might include developing an operational definition for some concepts or creating policies and procedures that specify how certain information is entered and categorized in information systems for police departments. Or, organizations can work from the more granular information to "roll up" the categories into a concept. For example, a researcher might work with specific offense names in a tracking system to create one overall category. A researcher could ask for all offenses that include violence of some kind and then select and combine the offenses they would use and combine it into one variable or data field. When this approach is used, it is most effective for the researcher to show how they coded and defined their offense categories and share it with practitioners in the field for feedback.

Police departments were asked about how they define violent crime and provided the following:
- Responses ranged from no definition provided, offering NIBRS categories, or referring to the Hawai`i Revised Statutes.

Data and Statistics to Help Reduce Violent Crimes in the Community
Police departments use data and metrics to inform their policing practices, and certain information on violent crimes and/or gun crimes could assist them with carrying out their work more successfully. While police departments might already be coordinating with their own research and analytics staff, they might not have the capacity or resources to take on additional research in this area. Additionally, it is important to bring in their expertise to inform the collection of data and research for understanding and responding to violent crimes effectively at the state level.

Police departments were asked what type of data and statistics would assist them in reducing violent crime in their community, and departments had similar responses that could be organized in the following way:

- Automating data on crime trends for more efficient identification of "hot spots."
- More violent crime data in-real time.
- Consistent, reliable data which could be broken into categories like location, time of occurrence, victim demographics, offender demographics, and weapon information.

Crime Analysis or Research and Statistics Unit

Police departments often employ their own staff to conduct research and analytics. Staff may help with reports and statistics that are shared with stakeholders and the community in order to share information on local crime trends. Additionally, police rely on data and analytics to carry out policing strategies that are effective at reducing crime in the community. These strategies often include community policing models and approaches such as "hot spots," where police will use data to target their resources in high crime areas. Similar to other criminal justice agencies, many police departments may vary in their resources and capabilities to conduct research and analytics with policing information and data.

Police departments were asked about their research capacity:

- Hawai`i and Maui have a single person conducting research and/or statistics who is embedded in another unit.
- Honolulu has five analysts in a research and/or statistics unit.
- Kauai has someone who handles statistics as a collateral assignment.

Recommendations

One important role of the GVVCC is to identify existing data sources and data gaps for violent crime in the state of Hawai`i. To aid in this effort, CJRI research staff conducted a survey of the four county police departments in the state to learn more about the collection, sharing, and reporting of arrest information. Based on the CJRI staff's prior experience with statewide data, they developed a survey that focused on documenting the local collection and sharing of arrest information with systems located in the AG's office. Since there are statewide systems that already aggregate and report out on statewide crime trends, it is likely most effective to use the existing technological infrastructure to share data with the state as well as any sources already used for statewide crime reports. However, local data collection and reporting can impact the accuracy and reliability of statewide data for research on violent crimes. The recommendations below identify ways to address limitations and gaps in current data.

Recommendation #1: Develop a statewide operational definition for violent crimes to guide the research and policy of the GVVCC.

This definition should include clarifying or delineating aspects of violent crime, including the role of gun crimes and/or other weapons, and any sub-categories of violent crime such as domestic abuse, assault, etc. It is unclear if other types of gun violence, such as self-inflicted or any gun related deaths will be included under the GVVCC's scope of research. If the definition includes these areas, then the GVVCC will need to identify other agencies that track these records since arrest reports do not include information on these types of injuries. Creating a clear operational definition of offenses and/or behaviors will help ensure research is aligned to address the GVVCC's priorities, and all data sources are identified.

Recommendation #2: Create a codebook or coding guide that links the operational definition of violent crime from the GVVCC to information systems and data sources.

The survey identified some of the local circumstances that might impact the strengths and limitations of using existing data sources for violent crimes. As research is undertaken, there may be others identified, yet at this time, the most likely reliable and valid source of information on violent crimes would be found in either CJIS or NIBRS data systems. These systems are valuable sources of data since they centralize and aggregate arrest information, and technological infrastructure already exists to share arrest information from all four police departments with a statewide source.

However, the GVVCC must clarify their operational definition in order for the most appropriate data source to be identified. Currently, NIBRS collects information on crime rates for the state and their violent crime categories might be useful for the GVVCC to use for research. However, NIBRS has structured guidelines on what categories are used and GVVCC may not agree with the categories of NIBRS since those are created for federal reporting. The members of the GVVCC may way to create their own state specific categories of violent crimes, in which case it may be necessary to rely on CJIS data. With CJIS data, it may be possible to create a data coding structure that would link specific offense descriptions or HRS violations to violent offense categories that reflect the GVVCC's definition. This might not even require police departments to alter their information sharing since researchers can work with the original offense information to collapse that data into one category of crime. Specifically, if the GVVCC can identify the violent offenses they want to focus on and link those offenses to the specific offense descriptions and/or HRS violations tracked in CJIS data (which reflect state laws), this coding structure could be provided to researchers to create consistent categories. Often, researchers will create codebooks for datasets that include this type of coding, and a statewide codebook on violent crime concepts that maps out offense descriptions and/or HRS codes would promote consistent use of arrest data for violent crime across researchers. The data systems

collecting arrest information for NIBRS or CJIS may be a primary source for studying violent crime [1].

Recommendation #3: Coordinate and collaborate with other statewide efforts to improve data collection in the state.

There are many organizations and individuals in the state working to improve data and research in criminal justice issues. To the extent possible, the GVVCC should share information about their data, research, and policy findings on violent crime with other agencies and working groups. Research staff at the CJRI are creating a pretrial database and reporting system as tasked in HRS 614, which includes reporting out on pretrial metrics for the state. This system could report out on aspects of violent crime consistent with the violent crime definitions created by the GVVCC, such as using the same definitions and coding structure when calculating the rate at which individuals released pretrial commit new violent crimes. Related, this information could assist the data working group established from SB 210 during the 2023 legislative session to help provide continuity in working with violent crime information and data for the state.

Recommendation #4: Identify top priorities for the GVVCC research agenda to ensure other necessary information and data sources are identified to conduct research.

Just as definitions on violent crime can help the GVVCC identify specific information systems and databases for violent crimes and related incidents, understanding the types of research questions prioritized by the GVVCC would aid the permitted interaction group focusing on data in identifying other data sources that might be needed for violent crime research. Most social and human service agencies have more than one information system capturing data needed for this type of research, therefore narrowing down the topics would assist in identifying data sources. As this survey demonstrates, not all information can be translated

easily into data for research. Therefore it is necessary to narrow down categories of the types of data that would be needed so agencies can talk to their information technology and operations departments to find the sources needed for data. It is impractical to ask agencies to report out on all data they might be able to share especially if the goal is to narrow down the data that can be extracted for research, but providing them with the ability to review their sources of information and report back with what is available.

ENDNOTES

1. These two sources centralize arrest data for the state, but have different information systems, data structures, and security protocols. The CJIS system can have data extracted for data analysis at the case level and allows researchers to specify specific offense information in HRS. However, this data is protected with strict security rules and anyone accessing it must adhere to rigorous protocols established since it includes confidential information that is not part of public records. The NIBRS system collects data on crime trends in a standardized way as well, but follows categories established at the federal level.