# Empowering Communities through Transparency and Crime Data

**State of Minnesota: Minnesota IT Services**

**Category**: Category: Data Management, Analytics & Visualization

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# Executive Summary

Safe communities are built on trust and transparency.

Law enforcement agencies in Minnesota have made significant strides in ensuring the public have access to crime data, aiming to better serve the community's needs and identify opportunities for enhancing crime prevention measures. However, their initiatives extend beyond mere crime mapping – they also foster collaborations between communities and law enforcement agencies, ultimately contributing to an improved quality of life for all.

The Minnesota Department of Public Safety (DPS), in partnership with Minnesota IT Services (MNIT), began work in 2021, some under guidance from the Legislature, to illustrate its commitment to transparency and customer service. Completed in 2022, the work garnered praise from social advocacy organizations and the public.

- The Track-Kit program helps sexual assault victim-survivors get up-to-date information online 24/7 about the status of their sexual assault kit related to the crime. Track-Kit increases accountability, clarity, and ease of getting the required information.

- The Minnesota Crime Data Explorer (MN CDE) website allows users to learn about crime incidents in the state. Users can query, filter, and sort crime data, view trends in charts and graphs, export graphics and spreadsheets, etc. The Minnesota Bureau of Criminal Apprehension (BCA) publishes new data monthly and updates daily any changes to published data.

- The No-Knock Warrant Reporting work created an online form for law enforcement to report the use of no-knock warrants that could be compiled into useful data and published annually. The first report became available in December 2022.

This work was rooted in human-centered design to take care of anxiety and curiosity that can drive meaningful action to help make Minnesota become a more desirable place to live.

> **Why it matters:** Using data and visualization technology, Minnesota expanded access to information about crimes and law enforcement actions to build trust and improve data-driven decisions by the public, legislators, media, researchers, and law enforcement agencies.

# The Need for Better Data

Minnesota's Bureau of Criminal Apprehension (BCA) initiated three efforts to provide more information to Minnesotans. BCA's work ensured that the public, decision-makers, law enforcement agencies, and victims had access to the information they needed to support their vision – delivering exceptional law enforcement services for a safer Minnesota. These efforts tie to an overarching goal in BCA's 2021-2023 Strategic Plan: Provide comprehensive criminal justice information to authorized users for better decision-making. BCA likes to shorten that to be "the best crime reporting system in the country."

Having access to information at the public's fingertips can help criminal justice experts, researchers, and

everyday Minnesotans better understand criminal activity and what it means for their community. These efforts were also driven by action at the Minnesota Legislature. Legislation passed in 2020, Minnesota Statute 299C.106, required all rape kits from cases reported to police to be tested and permanently preserved. Minnesota Statute 626.14, subdivision 4, requires all law enforcement agencies that apply for a no-knock search warrant to report the following data to DPS within three months. This type of warrant, issued by a judge, permits police to enter a property without identifying themselves, which potentially can lead to dangerous situations.

In compliance with Minnesota Statute 299C.106, BCA worked with health care and law enforcement agencies to maintain a sexual assault evidence collection kit tracking system accessible to survivors. The legislation mandated sexual assault victim-survivors have access to information about the sexual assault kit related to their incident.

Before this work, information about the kit use (collection and testing) was not readily available. There was no definitive way to know how many kits were collected at a hospital compared to those submitted for testing. Through this work, BCA developed a unique barcode identifier for tracking kits and ensures victims of sexual assault get justice.

## About Track-Kit

Track-Kit is a comprehensive, statewide, web-based sexual assault evidence collection kit tracking system. It helps survivors track the location and status of their kit – from the point of collection to its final storage location. Track-Kit is mobile-friendly, anonymous, confidential, and free of charge to users.

Track-Kit uses a barcode system to update information about a kit's status and location in real-time. The medical facility that collects the kit creates the record by scanning the kit's barcode into the system. Law enforcement updates the status when the kit is sent for testing to an accredited forensic laboratory in the state. The forensics lab updates the status again when it receives the kit and when testing is complete. At any time, a victim-survivor can use their unique login and password to see the status of their kit.
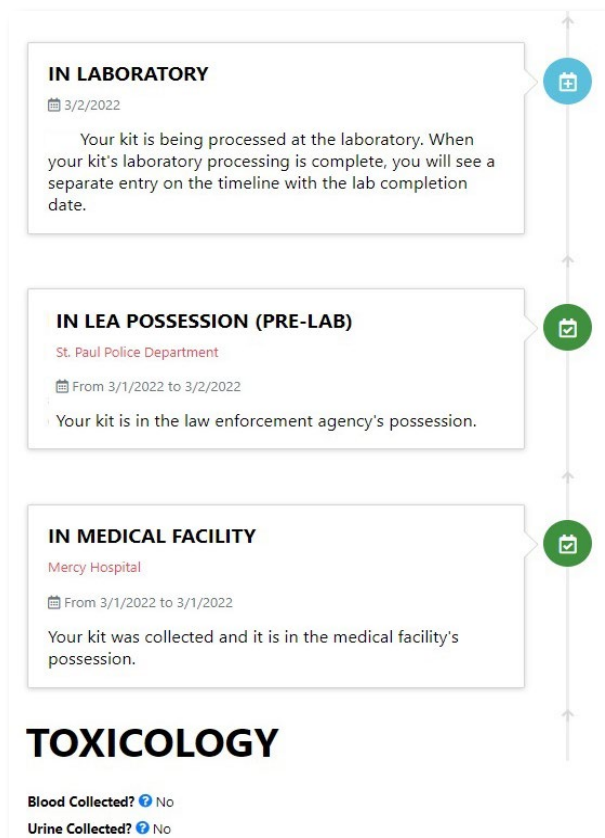
The new Track-Kit system applies to both restricted kits (when the survivor does not consent to testing) and unrestricted kits (when the survivor agrees to testing). All restricted kits are stored at the BCA. If a survivor with a restricted kit decides to change their mind about testing their kit status will reflect that change.

Hospitals and law enforcement agencies are responsible for providing the kit collection and incident number before the kit is sent to a laboratory for forensic testing or storage. If any information is missing when the kit arrives at the laboratory, evidence intake personnel are instructed to backfill the missing information before entering it into the Laboratory Information Management System.

With all kits uniquely barcoded and accounted for during the whole process, there is a low probability of kits 'falling by the wayside' and not being tested. Track-Kit introduces accountability, visibility, and transparency for victims. It is a significant tool that empowers them.

The Track-Kit website is automatically updated as the kit is transferred, from the hospital where sexual assault examination occurs and the kit is collected, to law enforcement where the incident details are recorded and logged, and to the forensic laboratory where scientists examine the evidence to conclude and/or generate investigative leads.



*A test example of what a victim-survivor would see if they had a kit collected at the hospital, transferred to law enforcement, and then transferred to a laboratory.*

## Data Integrity

Users have restricted access depending on their role in hospitals, law enforcement agencies, and labs. Users are also assigned 'standard' or 'administrative' privileges depending on the extent of their involvement with the software.

## Unique Features to Meet Multiple Challenges

The web portal is accessible to Spanish, Somali, and Hmong speakers to reflect the ethnic and lingual diversity of Minnesota residents.

Finding, training, and onboarding hospital staff during software development was a challenge. Support/advocacy groups developed a list of medical facilities across the state with at least one Sexual Assault Nurse Examiner (SANE) on staff to help provide input to build specific functionalities.

Developers also devised separate pathways and customized the software to process and handle the 'unrestricted' kits and the 'restricted' ones. Processing details needed to align at the user level to reflect kit status regardless of whether it is restricted or unrestricted.

User feedback led to the inclusion of information about advocacy and legal resources in Track-Kit, accessibility improvements in Chrome browsers, and automated email notifications for law enforcement agencies.


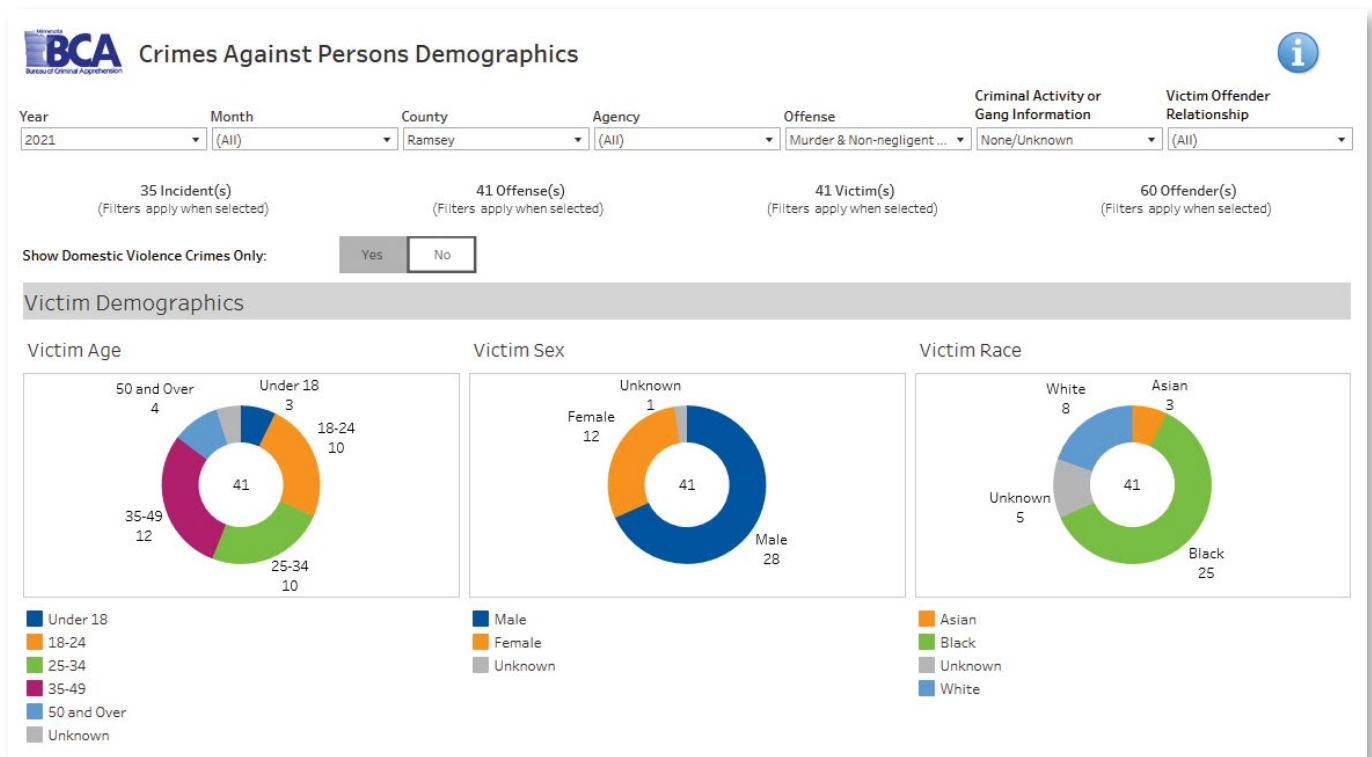
*A test example of the fields that hospital and law enforcement personnel enter into the Track-Kit system.*

# Immediate Crime Data

Minnesotans now can access the latest crime data using the Minnesota Crime Data Explorer portal to better understand crime and victimization in the state. The portal supplements an annual Minnesota Uniform Crime Report by making statistical data available throughout the year.

The Crime Data Explorer allows users to search the database and export graphics and spreadsheets. The tool provides transparency and improves accountability for law enforcement providing a foundation to help shape public policy in Minnesota.

# About the MN Crime Data Explorer



*Screenshot of the Crime Data Explorer showing charts and graphs.*

Minnesota Crime Data Explorer is easy to use and more detailed than previous reports, largely due to a change in crime reporting using the National Incident-Based Reporting System (NIBRS). While past reporting contained summary data about the most serious offense associated with an incident, NIBRS includes many more details on up to 10 crimes associated with an incident, as well as detailed data about the demographics of victims and offenders.

The new online tool incorporates NIBRS and adds to the existing annual uniform crime report published each year. It allows users to query, filter, and sort crime data; view trends in charts and graphs; and export graphics and spreadsheets. The visual options make the data more accessible and easier to understand.

The system contains data going back to the beginning of 2021, as well as use-of-force data through the beginning of 2020. In the Minnesota Crime Data Explorer, NIBRS data for a given month is published on the last Monday of the following month. Pursuit,

use-of-force, and firearms discharge data are published quarterly, on the last Mondays of January, April, July, and October. Once published, all data are updated daily. Data for prior years are also available in annual Uniform Crime Reports that are posted on the BCA website.

## Data Integrity

Though most of the crime data is non-private information, various law enforcement agencies need to submit data securely because they can contain sensitive investigative information. The entire BCA infrastructure is designed to meet FBI security policies and is regularly audited for compliance. BCA provides extensive training on the proper entry and classification of crime data. BCA forwards the appropriate data to the FBI for compiling national crime statistics. This crime data is reported to BCA through secure network connections over the MN Criminal Justice Data Network.

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## Launch and Continuing Improvements

To build the portal, BCA and MNIT needed to select a new type of tool: data visualization. The team overcame the challenge to find the right tools to display data while supporting other applications in the absence of an existing platform.

The Crime Data Explorer along with other new applications at BCA highlighted a need to upgrade the security infrastructure. Configuring the network, servers, databases, and applications to provide the needed features securely was a challenge that needed some doing.

The Minnesota Crime Data Explorer was launched in phases to add more crime categories gradually. It currently contains the following data categories:

- Arrest Information
- Bias-motivated crime
- Firearms discharge
- Law Enforcement Employee Information
- Law Enforcement Officers Killed and Assaulted
- Missing Persons
- Offense data for crimes against persons, property, and society
- Pursuits
- Use-of-Force
- 5-Year Index Crime Trends

A companion site containing drug overdose, death, and crime data is in development. The developers plan to add features such as mapping capabilities, and inclusion of ethnicity and carjacking data.

## Law Enforcement Accountability

Alongside the Crime Data Explorer reporting on use-of-force and firearms discharge data, BCA added public reports for other forms of law enforcement action. Minnesota Statute requires all law enforcement agencies to report the following data within three months of the warrant application.

- The number of no-knock search warrants requested, court-issued, and executed.

- The number of injuries and fatalities suffered, if any, by peace officers and civilians in the execution of no-knock search warrants.

- Any other information the DPS commissioner requests.

In May 2022, BCA finished developing a mechanism to retrieve the data, conducted an element-by-element analysis of the data to ensure that the information included in the report complies with Minnesota statutes and refined processes for data submissions. The No-Knock Warrant Reporting System was an extension of existing systems familiar to law enforcement users.  In 2021, BCA published its first No-Knock Search Warrant Annual Report.

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Before this effort, much of this data – from the location of a sex assault kit to law enforcement actions and crime trends – was unavailable or only discovered on a case-by-case basis. Minnesota is using technology and data visualization to streamline crime data available to the public and is committed to increasing transparency and access to it, along with accountability for custodians of law. The safety of data and protection of individual privacy make it essential to upgrade technology and remove bugs from the system while working to improve digital functionality continually.

## Positive Feedback

BCA has received positive feedback about these new systems from data consumers, law enforcement, hospitals, and people who use the systems:

- "The no-knock warrant reporting is easy to use."
- "Users like viewing and exporting timely data in the MN Crime Data Explorer."
- "Track-Kit is intuitive and easy to use."

When compared to other states, the Minnesota Crime Data Explorer has more features for users – allowing them to sort and filter data in many ways and providing simple and easy-to-read graphical representations. Minnesota turns the data into a story.

## Greater Accountability

The Track-Kit system relieves uncertainty. It has introduced accountability and visibility to the sex assault kit collection, submission, and testing workflows. The state BCA Forensic Science Services have access to a wealth of valuable data that provide insight on kit collection volume, submission history and trends to the laboratory, and more. It routinely publishes sex assault kit data on the BCA website every 60 days.

Before this effort, no-knock warrant data was not thorough and often lacked details on the overall number of such warrants. Crime data though available on request to the BCA, took days or weeks to compile depending on the complexity of the request. That data is now instantly available for media and reporting.

These efforts helped BCA develop a more secure infrastructure that provides access to data while minimizing cyber risk. The Crime Data Explorer successfully piloted business intelligence capabilities at BCA and has led the agency to identify several other potential projects that will benefit from a similar implementation.

The data collected is used to compile the annual report and respond to ad-hoc media requests for information. The crime data made available is a major improvement that allows public access and public policy decisions based on current information.

## Who Benefits

**Victims Survivors:**
Assured their case has not been forgotten.

**Law Enforcement Agencies:**
Form budgets and plan and determine resource allocation to address crime.

**City Planners:** Determine the impacts on geographical jurisdictions they represent.

**Researchers:**
Study the nature, cause, and movement of crime and law enforcement tactics.

**Legislators:** Draft anti-crime bills.

**Media:** Inform the public about crime and law enforcement tactics.

**Broader Public:** Understand what is occurring in their communities.