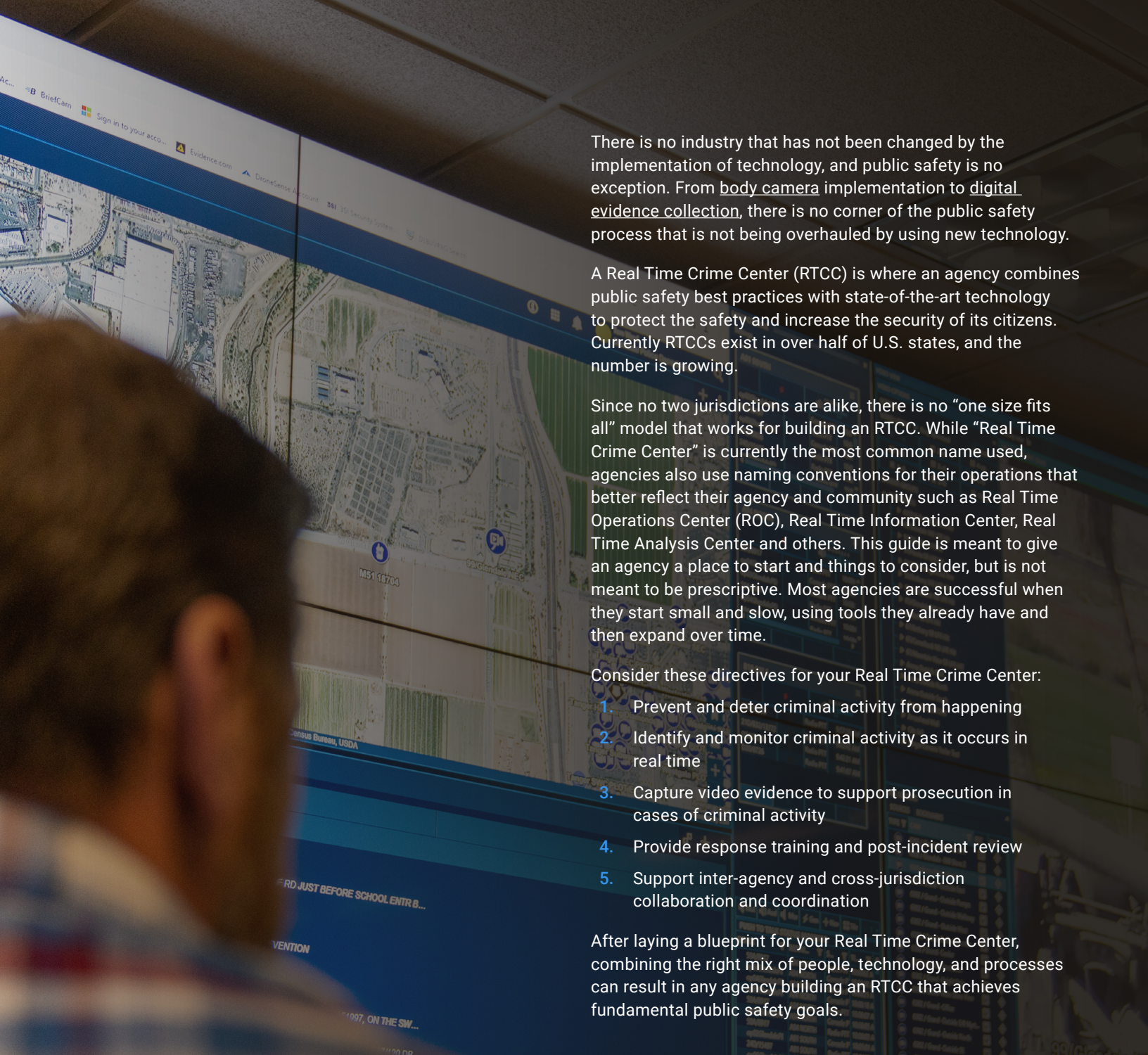




How to build a Real Time Crime Center

Quick start guide



There is no industry that has not been changed by the implementation of technology, and public safety is no exception. From body camera implementation to digital evidence collection, there is no corner of the public safety process that is not being overhauled by using new technology.

A Real Time Crime Center (RTCC) is where an agency combines public safety best practices with state-of-the-art technology to protect the safety and increase the security of its citizens. Currently RTCCs exist in over half of U.S. states, and the number is growing.

Since no two jurisdictions are alike, there is no “one size fits all” model that works for building an RTCC. While “Real Time Crime Center” is currently the most common name used, agencies also use naming conventions for their operations that better reflect their agency and community such as Real Time Operations Center (ROC), Real Time Information Center, Real Time Analysis Center and others. This guide is meant to give an agency a place to start and things to consider, but is not meant to be prescriptive. Most agencies are successful when they start small and slow, using tools they already have and then expand over time.

Consider these directives for your Real Time Crime Center:

1. Prevent and deter criminal activity from happening
2. Identify and monitor criminal activity as it occurs in real time
3. Capture video evidence to support prosecution in cases of criminal activity
4. Provide response training and post-incident review
5. Support inter-agency and cross-jurisdiction collaboration and coordination

After laying a blueprint for your Real Time Crime Center, combining the right mix of people, technology, and processes can result in any agency building an RTCC that achieves fundamental public safety goals.

“You have to have a team that understands the goal and intended outcome at the beginning of your [RTCC] launch point... you have to at least start with a canvas of understanding what you’re intending to solve for and the intended outcome is going to be.”

– Chief James White, Detroit Police Department, from the [Police1 Webinar: How to Build Community and Stakeholder Support for Real-Time Intelligence Operations](#).



Real Time Crime Center blueprint: equipment, people, technology

Equipment

What are the physical requirements for a Real Time Crime Center?

Before doing anything else, the physical requirements for a Real Time Crime Center should be assessed. Does your agency have a space large enough to hold all the identified staff and their necessary equipment, or do you need to create one?

Even to run a “bare bones” RTCC, your agency will need:

- A desk or table and chair for each operator and the supervisor
- A computer with multiple monitors for each operator
 - One monitor can be used by an operator, but will likely cause delays and decreased efficiency.
 - You should also ensure that the computer is running an up-to-date operating system and has enough processing power to run multiple programs at once, including software with video capabilities.
- Radios or an integrated radio console to communicate with dispatch and officers in the field
- Phones (landline and mobile)

If your RTCC will be conducting any type of briefing for command staff, outside agencies, or visitors, consider including extra chairs, a large conference table, and conferencing equipment such as phones, webcams, and conference lines. You may also want to make a separate room or area available for such briefings so as to not disrupt RTCC operations.

Even a small RTCC is packed full of technological and computing equipment. While it may not be obvious, take the following into consideration, particularly if you are newly creating an RTCC space:

- Is the power supply sufficient and safe to power all of the equipment? Avoid plugging everything into one power strip or outlet.
- Is the room’s heating, ventilation and air conditioning system able to keep the room cool when fully equipped and staffed? Additional ventilation or cooling may be needed.

Most importantly, when evaluating your equipment needs, ask this question: does everything work? The last thing you want to do is invest in an RTCC full of equipment that does not work. This does not mean solely checking whether everything turns on, although that is a start. Make sure your computers are new enough to run the technology being used. Consult with your information technology (IT) department to ensure all your systems can properly feed into the RTCC, or make sure there is a plan in place to establish that infrastructure and compatibility. Be sure to include IT from the beginning of your planning to support the initial infrastructure of your RTCC as well as consult for the future growth of your operation.



How to layout desks and equipment in a Real Time Crime Center

Once your agency has allocated space for the RTCC, make sure you have a blueprint for the center before installing any equipment. Each operator should have their own station with their monitors. Ideally, the stations should be close enough to each other that operators can consult with each other or work together with little effort.

Large wall mounted monitors should be visible by all operators and anyone coming into the RTCC for information. This way they can be used to mirror an operator’s screen if something needs to be viewed by multiple people at once. It also gives a supervisor the ability to see what is going on without distracting or hovering over an operator. The RTCC supervisor should also be in charge of determining what content can be shown on the wall monitors, and whether certain things should be displayed at all times.

Pro tip 1: Consider adding a video wall backdrop option with your agency logo to use when visitors want to take photos in your center.

Pro tip 2: Consider a room with a window where leadership and other departments like public affairs can view proceedings without disrupting on-going response.



People

Choosing the right people to staff the Real Time Crime Center is paramount to the center's success. It is important to staff the RTCC with people who are passionate about the mission. Inherently, the responsibilities of an RTCC staff member require technological skills and comfort with new technology and processes. While RTCC-specific training can and should be provided to those who work there, a working ease with technology is important. While it is a position off the street, work in the RTCC involves a combination of both technological skill as well as experience. Ideal RTCC operators are technology-fluent with enough relevant knowledge to provide support during an on-going incident. In addition, all staff members should be properly vetted as an RTCC operator has access to multiple sources of sensitive information. Overall, your RTCC should be equipped with capable, knowledgeable, and qualified people who want to be there and earn the position – whoever they may be within your agency.

Sworn versus civilian personnel in a Real Time Crime Center

RTCCs are unique in that they can be staffed by sworn or civilian personnel, and both have specific benefits they can bring to a real-time operation. Sworn officers have a deep and innate understanding of what an officer in the field is facing. This knowledge can be beneficial in an RTCC because sworn officers use this knowledge to assess incidents in a way that a civilian would not. They understand the priority of officer safety and have the legal training to know when something viewed on a camera has the probable cause required to take further action. In addition, more experienced sworn officers who staff an RTCC bring a specific knowledge of their working area that can be unmatched in value. For example, they intimately know certain streets, locations, addresses, and even people, which can cut down on response time in an RTCC and allow for quicker, more accurate communication with units on scene.

The value of civilian personnel in an RTCC setting should not be overlooked, and can be beneficial in a number of ways for your agency. With many agencies today facing sworn personnel shortages on the street, staffing the RTCC with civilian operators is a helpful option. With the right training, a civilian can be fully equipped to operate cameras, learn the area, and conduct analyses necessary for RTCC operations. There is no need for the physical requirements of patrol or firearms training, making an RTCC position an ideal place for an agency to utilize civilian employees. If you decide to staff your RTCC with civilians only, you may require more law enforcement training investment; for example, probable cause to monitor an individual with CCTV resources or basic radio communication protocols. In an ideal situation, an RTCC staff with a mix of sworn and civilian operators will reap all the benefits mentioned above.

What does a Real Time Crime Center analyst do?

At least some portion of RTCC staff, if not all of them, should be there in an analytical capacity. This can mean an intelligence or RTCC analyst responsible for correlating data from multiple sources into investigative or forensic leads following an incident. Ideally, RTCCs also have crime analysis capacity utilizing hotspotting, trend analysis, and pattern discovery to direct the focus of the center in a data-driven way. Across different agencies, analyst roles are filled by both sworn and civilian personnel.

As with any new unit or endeavor for an agency, the establishment of an RTCC must come with proper training. The commanding officer of the RTCC should be responsible for designing a training program specifically for RTCC personnel, and it should cover topics ranging from RTCC technology use to legal considerations of using CCTV footage.

Whoever you decide to fill this role with at your agency, make sure they are properly trained and qualified. There are many civilians who are educated and trained specifically to fill analytical roles in public safety. If you choose to fill the roles with sworn officers, make sure to still provide training from accredited bodies such as the ones listed below.

Where can I find training for Real Time Crime Center personnel?

- [International Association of Crime Analysts \(iaca\)](#)
- [National Real Time Crime Center Association](#)
- [U.S. Department of Justice Bureau of Justice Assistance \(BJA\)'s National Training and Technical Assistance Center](#)
- [The Florida Crime and Intelligence Analyst Association](#)



Chain of command & department structure for a Real Time Crime Center

When creating a Real Time Crime Center, a full picture of staffing and personnel needs to be considered. While taking the above considerations into account regarding the shift personnel and operators, an RTCC needs a command structure as well. There should be a supervisor present in the RTCC to whom the operators can report, ask questions, and from whom they can receive assignments. Ideally, a supervisor is present for every shift. A commanding officer should be established for the RTCC who is in charge of operability as a whole, policy, training, and overseeing the physical creation of the center. This chain of command helps ensure accountability for all RTCC operations and activities.

As an agency, also consider how the RTCC fits in structurally to what currently exists. Is there an existing unit or department that the RTCC fits into, or does a new one have to be created? What other units should the RTCC be working with and how do their responsibilities get allocated? For example, your RTCC should be in constant contact with your Crime Analysis Unit to ensure up to date information on crime trends and patterns. In addition, your Detective Unit should be trained to check with the RTCC when they are assigned to a case to be briefed on any investigative leads or intelligence gathered in the RTCC. You want to ensure you are not duplicating work across the agency. An RTCC should bolster and support other functions within the agency and have its own clear role as well.

It is also important to involve PSAP supervisors and dispatchers early on in the process of setting up an RTCC. It is critical for these personnel to understand each other's responsibilities when the RTCC is supporting a call for service, and the procedure for the RTCC to come over the primary channel, add comments to the call or incident notes, and other supporting activities for a call for service. The determinations made for how this support is conducted is crucial to ensure joint understanding and should be documented in supporting Standard Operating Procedures (SOPs).

What access security should I consider for a Real Time Crime Center?

Access security is a very important consideration for a Real Time Crime Center. An RTCC can be a lively and exciting place, especially during or following a high profile incident. Many different people within the agency will understandably want easy access to the RTCC, ranging from an officer looking for support on scene to detectives to surrounding agencies. Especially for agencies creating a new Real Time Crime Center, it should be expected that many people will want to see it, understand it, and potentially be a part of it. However, there are many important considerations for who is allowed to see the video and data coming in to the center and how it gets disseminated. Consult existing [Commission on Accreditation for Law Enforcement Agencies, Inc. \(CALEA®\)](#) standards to understand how your RTCC should be secured with things like keycard entry and sign-in logs. It is critical to ensure there is a balance between the RTCC being an information hub and properly securing and protecting the information within.

How does the community engage with a Real Time Crime Center?

The Real Time Crime Center is an essential part of your agency's overall community engagement strategy. Many community members may be wary of agencies having access to numerous cameras but the RTCC can be important in reassuring the community that your agency is working to keep them safe. RTCCs have been shown to lead to increased on-scene awareness, officer safety, quicker investigative leads, and more closed cases. But these benefits must be proven, and communicated, to the community. Consider releasing press statements or social media posts to educate the community about what the RTCC does and doesn't do. Track and release "success stories" to educate the public on the value of the RTCC. When conducted effectively, the community will learn and understand the value of the RTCC. Do not forget that community individuals can be valuable members of the RTCC team.





A major city manages as many as **32,000** video feeds.

The average U.S. city has six video cameras for every **1,000** residents.

Source: 2022 comparitech study

Technology

What technology is needed in a Real Time Crime Center?

The easiest place to start in regards to technology for your RTCC is with technology that you already own. Consider information that's already at your disposal, such as the location of incidents from Computer Aided Dispatch (CAD), or your jurisdiction's license plate hot hit list. Your agency may have information that is available but lives across disparate systems, making it difficult to access quickly or connect to an on-going incident in real time.

By bringing those technologies together in one place and operationalizing access, RTCCs can maximize the likelihood that an agency is able to respond to crimes occurring in real time effectively.

Consider utilizing these technologies in your RTCC:

- Geographic Information System (GIS) mapping
- 9-1-1 call systems and call transcription tools
- Computer-Aided Dispatch systems
- Officer and unit location tracking
- Real-time alerts (from systems such as gunshot detection, mobile panic buttons, etc.)
- "Smart city" sensor-related data (e.g., water levels and other critical infrastructure data)
- Video systems and archives
- License plate recognition technology and databases
- State and national databases
- Records and evidence management systems

As a centralized location for information, also consider which of these data sources can be mapped in order to provide relevant location-based context pre- or mid-incident, or for post-incident analysis. Leverage your jurisdiction's existing GIS resources (such as mapped resources like fire hydrants, patrol zones, data found in records management systems, etc.) to maximize the value of this geospatial information.

What video technology is used in a Real Time Crime Center?

A critical component of an RTCC is access to a public surveillance system, often known as Closed-Circuit Television (CCTV) cameras. The amount of cameras available to the agency can vary greatly depending on the agency's physical coverage area and budgetary resources. CCTV cameras themselves can also range in quality, control ability (fixed versus pan, tilt and zoom (PTZ)), connection type, and visibility to the public (overt vs semi-covert)).

Once you establish what cameras your agency owns or has authority over, take stock of the following things:

- Inventory: How many total cameras are there?
- Location: Where is each camera and is it actually installed where it is supposed to be?
- Labeling: How is each camera named or labeled, and is it easy to understand?
- Status: Is each camera working properly?
- Visibility: Is the visibility of the camera blocked in any way (e.g., light pole, dirt on lens)?

Build a database of cameras including all of the above listed attributes in order to be equipped for future maintenance, addition of new cameras, and integration with other systems in your RTCC.



Keep in mind that you are not limited to solely using the cameras your agency owns and maintains. There are many opportunities for partnerships to expand the breadth and coverage of your CCTV system. Consider other government or municipal partners that may own or operate CCTV cameras, such as surrounding public safety agencies or local/state governmental bodies (public transportation authorities, public housing authorities, school systems). With the right software and agreements in place, all of these camera resources can be integrated into your RTCC.

In addition, cameras are an excellent way to get the community involved. Many local businesses, such as retail stores, gas stations, and restaurants, in your jurisdiction are likely already using some kind of CCTV network. By deploying a public-private partnership program, your agency can integrate those camera feeds into your RTCC and exponentially expand your physical camera coverage, all while increasing the business owners' feelings of safety as well.

In addition, the amount of individual private cameras present in a community is increasing by the day. If your agency creates or already has a camera registry program, your RTCC is well positioned to manage that data. The analysts can liaise with the community and investigators for more efficient post-incident investigation and evidence collection.

What systems are used in a Real Time Crime Center?

The first and most important piece of software your RTCC will require is a video and data integration platform. A [video surveillance integration](#) platform allows your RTCC operators to access multiple camera feeds quickly and efficiently. Prior to this investment, it is possible (and likely) that the CCTV cameras on your network run on different [video management software](#) that needs to be accessed separately by the end user. A video integration platform should allow your RTCC operators to access disparate video sources (agency owned or from a partnership mentioned above) from one place with ease and efficiency.

In addition to integrating multiple video feeds into one software platform, your agency should explore options for [911 call](#) and/or [computer aided dispatch \(CAD\)](#) integration into that software as well. Allowing an RTCC operator to see 911 calls or CAD incidents as they come in, enhanced by the context of relative location to camera feeds, is invaluable. In some instances, RTCC operators are able to use nearby video resources to give an incident disposition before a resource is available to be dispatched in the field.

While video feeds are often the focus of the RTCC's resources, a Real Time Crime Center gives an agency an opportunity for a centralized place to integrate other types of relevant systems. The following types of technology can be an immense benefit to an agency, and can specifically integrate with a public surveillance system deployed in an RTCC:

- Gunshot detection systems use acoustic sensors to provide real time alerts about the location of gunfire. While these systems have inherent benefits for public safety agencies, when deployed in conjunction with a Real Time Crime Center, CCTV cameras can be used to supplement this information with potential evidence regarding weapons offenders and increase response time to a scene by officers in the field. Cameras can also be used to increase officer safety awareness when coming onto a scene that has an increased potential for firearm presence.
- [License plate recognition \(LPR\)](#) systems scan and capture license plates on vehicles, and compare them to databases to check for tickets, warrants, or stolen vehicles. LPR cameras are often installed on police vehicles or fixed locations, such as light poles. While greatly beneficial on their own, LPR systems can be integrated into the CCTV network of an RTCC and increase efficiency greatly. Oftentimes, operators look to identify license plates from recorded CCTV footage to generate investigative leads following an incident. However, a legible license plate can be hard to capture. When an LPR system is infused into an RTCC, it gives operators another tool to respond to crime in real time and increase leads following an incident.
- Video analytics software processes information captured by your CCTV network and can flag or alert an operator to a specific event or content. LPR systems are an example of a video analytics software but there are many software partners that can be brought into your RTCC to more efficiently process and review the large amount of video data you have at your fingertips.

Overall, it's important to ensure that the software deployed in your RTCC is increasing efficiency for the RTCC operators. Consider investing in software that integrates as many of the resources you want access to, and limits the number of disparate sources your operators need to engage with.

Watch the Police1 Webinar: What are the most critical technology integrations for real-time intelligence operations?

 WATCH THE VIDEO NOW



Process

In addition to establishing the people and technology in the Real Time Crime Center, it is important to also establish a day-to-day process for RTCC personnel.

Are Real Time Crime Centers proactive or reactive to crime?

RTCCs are unique in that they are both proactive and reactive in nature. When a priority incident occurs, an RTCC operator can jump into action and assist with the incident until it is resolved. By providing video support to officers on scene, or even investigatively after an incident, the RTCC is reacting to what happens in your agency's jurisdiction. However, there is always potential for a "slow day" or a time when "nothing is going on". By using analytical techniques, such as identification of crime patterns and hotspots, operators can use data to drive priority locations for the RTCC to monitor during these times. Just like on the street, there is always an area in need of a patrol presence, and the RTCC can proactively be an additional resource in that mission.


What are the best hours to staff a Real Time Crime Center?

In an ideal situation, an RTCC should be staffed 24 hours a day, seven days a week and 365 days a year. However, that reality is difficult for many agencies to achieve given budgetary and personnel constraints. If it is not possible to staff your RTCC at all times, conduct a proactive analysis to identify your agency's peak times for calls and crime and use that to determine a shift appropriate for RTCC staff.

Centralized versus Decentralized Real Time Crime Centers

The primary difference between a centralized and decentralized Real Time Crime Center is the size of its focus in the community. A centralized RTCC has a wider, as well as an opportunity for regional scope of the community, usually encompassing more than one precinct, municipality or jurisdiction. A wider coverage area allows for analyzing a more comprehensive view of crime patterns, and more data, information and even technology and equipment sharing across jurisdictional boundaries, and even cross-agency boundaries. A centralized RTCC, however, can sometimes be removed from the direct day-to-day operations of parts of the community. A decentralized RTCC allows your agency to focus on one area of your jurisdiction in order to be hyper vigilant and embedded in that area's policing and community support. There are benefits to both models. This model has proven to be successful in larger agencies, or agencies looking to provide a proof of concept of an RTCC focused on a problem area.

"The centralized model allows one team of people to get a big picture of what's going on in the city, things that cross precinct boundaries, crime patterns, and they're able to look at all of that," said David Lavalley, Assistant Chief of Detroit Police Department, in the [Police1 Webinar: How to Build Community and Stakeholder Support for Real-Time Intelligence Operations](#). "In the decentralized model, they are able to focus on one smaller area and one of the advantages for us is that the officers and detectives have a personal connection to the information that's available in the crime center."



"We have both a centralized and decentralized model. The centralized model allows one team of people to get a big picture of what's going on in the city, things that cross precinct boundaries, crime patterns, and they're able to look at all of that. In the decentralized model, they are able to focus on one smaller area and one of the advantages for us is that the officers and detectives have a personal connection to the information that's available in the crime center."

- Assistant Chief David Lavalley,
Detroit Police Department



Additional considerations: how a Real Time Crime Center can improve officer and civilian safety

The presence of a CCTV system, coupled with the active monitoring being done in a RTCC, has obvious value for improving the safety of the community. This is echoed in the mission of deterring crime before it happens, and the increased potential for video evidence to help prosecute criminals after an incident has occurred. While the value for civilian safety is clear, a Real Time Crime Center is paramount in improving officer safety as well. As an incident unfolds, RTCC operators can equip officers with an immense amount of information before they ever arrive on-scene, including offender and witness descriptions and possible presence of a weapon. In addition, RTCC personnel can monitor a situation in which an officer is conducting an arrest or waiting for additional units, thereby adding a level of protection to that officer until additional support arrives on-scene.

Real Time Crime Center information sharing in real time and beyond

Just as is true with any agency and the data in their multiple systems, such as CAD and RMS, there is no value in the information that comes out of a Real Time Crime Center unless it is shared with those who need it. In real time, there must be accurate communication between RTCC operators and responders on scene. After an incident has occurred, any potential information or investigative lead must be shared with detectives and judicial partners. If a potential crime pattern or trend is discovered in the RTCC, this information needs to be relayed to patrol and other units who may be able to be an active presence in that area. Consider establishing a procedure in which RTCC operators or supervisors can distribute a briefing of some kind that contains all of this information as it unfolds. In addition, ensure that there is proper communication between your RTCC shift personnel so that no one's time is wasted and your resources can be used effectively.

Implementing Real Time Crime Center policies

There are a number of policy considerations to take into account when establishing a Real Time Crime Center. First, your agency should establish a standard operating procedure (SOP) for the RTCC that covers purpose, structure, and responsibilities. Secondly, as a result of the RTCC heavily utilizing cameras, there are specific policy considerations surrounding legal responsibility and civil liberties that need to be acknowledged. Operators should be trained on what they watch and monitor, and when camera footage can be used. In addition, there should be policies that outline how the integrity of video evidence is maintained, and how video evidence is stored and disseminated. For example, while using video surveillance in public places is currently acceptable, cameras should not be used to monitor private areas like citizens' backyards or inside their residences, even if they are within camera view. Operators should also be trained on what constitutes probable cause to monitor an individual via video, and how long they can use video resources to monitor a specific person without a criminal predicate action. Your agency should stay up to date on legal developments surrounding the fourth amendment and/or video surveillance to ensure your RTCC is operating within applicable state and federal regulations. In addition, as laws concerning monitoring are different state by state, an agency should consult legal counsel as to the specific laws in their jurisdiction.



About the author

Nicole Izbicky is the Manager of the Cloud Solution Specialist team at Motorola Solutions. This team specializes in the CommandCentral suite of products, and their goal is to ensure the deployment and configuration of these products matches the goals and vision of the customer. Nicole has a demonstrated track record of synthesizing data to create actionable insights. Throughout her career, Nicole has continuously maintained the belief that an intelligence led model can make the justice system stronger. Nicole has a passion for helping people understand how the use of a data driven approach can strengthen their work, particularly if it is new for them or their industry. After earning her Masters in Forensic Psychology from John Jay College of Criminal Justice, Nicole worked in a variety of settings across the public safety/legal space including a residential reentry program and a national trial consulting company conducting mock trial research. In 2018, Nicole joined the Chicago Police Department as a Criminal Intelligence Analyst, where she sat alongside sworn officers in a real time crime center, assisting with intelligence sharing, crime analysis, and video monitoring. She worked to create intelligence products for use at all levels of the department, ranging from patrol officers to the Superintendent of Police. It was this experience that contributed heavily to Nicole's passion for incorporating technology into the public safety space.



Are you just getting started with your Real Time Crime Center and looking for resources and guidance? Contact us for a sample RTCC policy and other resources to get started today.



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