

A woman with long dark hair, wearing glasses and a grey blazer, is shown in profile, focused on her work. She is sitting at a desk in a server room, with her hands on a keyboard. In the background, there are several computer monitors displaying data and network diagrams, and rows of server racks with glowing lights.

Disrupting and Dismantling Gangs with Digital Intelligence



Cellebrite

Digital intelligence
for a safer world



Once limited to major US cities, gangs are on the rise globally and now threaten communities throughout the world by using digital communications. By exploiting mobile devices and social media to recruit new members and commit crimes, organized crime poses new challenges to law enforcement.

Today's gangs are frequently interrelated, transnational and take full advantage of digital devices and platforms to communicate with each other, coordinate their criminal activities, intimidate rivals and recruit members. The increased adoption of technology allows them to operate with impunity in multiple countries and the statistics are staggering.

Gangs are now responsible for 80% of crimes committed in many communities¹ with gang-related crimes running the gamut from intimidation, fraud and extortion to drug, weapon and human trafficking to robbery, assault, and murder. And in cities with especially strong gang presence such as Chicago and Los Angeles, 50% of homicides are reported as being gang-related.²

As the number of gangs worldwide continues to expand (an estimated 20,000 gangs comprised of over 1-million members reside in the US alone)¹, law enforcement is faced with the ever-increasing challenge of tying gang members to crimes and, ultimately, bringing offenders to justice.

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Growth of Gangs

70%

of police agencies
report increase in
gang membership³

20,000 gangs and
more than
1 Million gang
members
in U.S.¹

5,000

gangs in Europe,
an increase of 40%
from 2013 to 2017⁴

49%

of US jurisdictions
report increase in gangs⁵

2–10 Million

gang members worldwide⁷

The advancement and low cost of digital technology allows gangs to conduct their business and recruit members with increased anonymity and mobility. Encryption and the massive volume of digital information exchanged between gang members can slow down investigations and cause valuable evidence to be overlooked.

Digital intelligence solutions give law enforcement the upper hand in the fight against gang-related crimes. The right solution grants access to devices that are traditionally inaccessible and integrates AI and machine learning to reveal critical connections between criminal activities, locations, gang members, rivals and other actors and organizations that would often go unnoticed by traditional methods. As a result, investigators are able to build strong cases against the maximum number of members to dismantle gangs and make communities safe.



1 Million

Number of gang members in the U.S.¹

Gang Crime



Drug Trafficking

58%



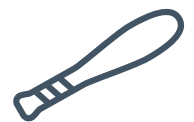
Assaults

45%



Robberies

34%



Threats/
Intimidation⁵

58%

How gangs are using social media

Some 88% of police agencies report an increase in the use of social networking sites by gangs.³ In fact, gang-related incidents almost always leave a digital fingerprint. Gang members text, chat, participate in social networking sites and take digital photographs of just about everything, just like the rest of their generation.⁷

The most popular social media sites used by gangs are Facebook, YouTube, Instagram and Twitter. Despite the digital savvy of modern gang members, however, they still leave digital footprints all over the internet and post incriminating information, which is often publicly available.

Social Media Platforms Used by Gangs



Social media has replaced the physical walls in neighborhoods where gangs traditionally marked their territory. Gangs can now protect their turf and communicate messages internally and with rival gangs using the internet in what experts call: “cyber-banging.” Instead of making a statement with spray paint, gangs go online to threaten rivals through text, photos and videos featuring flashing guns and gang signs. Often, these threats escalate and lead to real-world violence.

Gangs also film and post footage of physical attacks on victims to intimidate rivals and increase their own credibility. “Facebook is their new street corner,” says Sgt. Lou Savelli, a former NYPD gang specialist. “Rather than yelling at each other on the streets and on the walls, now they do it on the internet and everyone can see.”⁸

In one highly publicized incident, gang members in East London filmed themselves enforcing their territory by brutally beating and robbing their victims and then posting the video to social media.⁹

Social Media—The Ultimate Recruitment Tool

Social media sites provide a platform to recruit members locally, nationally and even internationally through direct communication or indirectly through videos and photos that spread the gang’s brand and glorify the gang lifestyle.⁵ “Older gangsters used to tell kids, ‘come see us in the hood.’ And now it’s ‘come see us on Facebook,’” notes a Houston Police Department detective.⁸



20,000

Number
of gangs
in the U.S.¹

By publicizing the supposed benefits of being in their gang, members hope to influence youth to join them. They post photos and videos showing off their parties, fancy cars and clothes, guns, money and drugs and brag about their exploits, all in an effort to make an impression on vulnerable young people.¹⁰

Gangs rely on mobile devices to coordinate their illicit activities and communicate with each other through phone service, direct messaging and emails. In doing so, they are leaving a trail of critical stored data including SMS logs, call activity, texts, emails and geolocation tagging.

When mobile devices are seized by law enforcement, they can extract this stored data and combine it with data from social media platforms to find crucial information. The combined data can help investigators identify connections between gang members, create timelines of events and other relevant information such as the location of a storage site for weapons.

How law enforcement is using social media to nail gang members

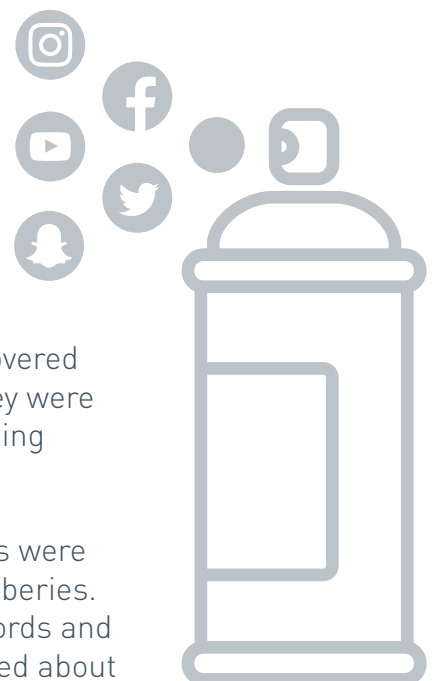
Gang-related crimes are by nature full of interconnected relationships between both members and rival gangs. The National Gang Center recommends maintaining up-to-date records such as photographs of gang members, their relations, tattoos and graffiti to help investigators understand these dynamics.¹¹ As noted, a lot of this information may be readily available online, with photos and videos taking the place of graffiti.

Gangs like to show off and post photos where one can see the colors, weapons, hand signs, etc. that identify the individual as a member of a particular gang. When a gang member attends a family reunion and uploads a video of it to YouTube, investigators can use this information to put faces with street names and identify participants' connections.

"Even five years ago, if you wanted to show an association between two people, you had to do surveillance. Now you can just go to blogs, video or image sharing sites," says Lt. Charles L. Cohen of the Indiana State Police.¹² In addition, metadata and geotagging of images will show where and when photos were taken.

The Cincinnati police, pioneers in the use of social media in investigations, dismantled a local street gang by using social media and phone records to identify links between key members. They discovered the criminals were using social networks to talk about the crimes they were plotting, as a vehicle to set up drug deals, and even upload incriminating videos.¹³

In one of New York City's biggest gang takedowns, 103 gang members were indicted on a variety of charges including murders, shootings and robberies. The successful investigation was largely made possible by phone records and incriminating Facebook messages in which the gang members boasted about



their crimes. According to the indictment, a gang member posted a message to a rival gang member bragging about one of the murders. In response, the rival sent a post promising revenge.¹⁴

With so much information about gang members available, it is not surprising that law enforcement considers mobile devices the most significant source of data with 86% actively using social media for investigations.⁵

The challenge to law enforcement—encryption, data overload and a ticking clock

As gangs become more digitally savvy, they are using technology to increase their anonymity and thwart law enforcement efforts. They are increasingly activating privacy settings on social media, turning to encrypted devices and using advanced messaging applications. And, as technology evolves, encryption is becoming the norm with over 50% of the web's traffic now encrypted.¹⁵ Encrypted devices may take hours to unlock and investigators without the appropriate tools may not be able to unlock them at all.

The sheer volume of data available online and on mobile devices is so great that investigative teams may not have the resources to carry out collection and analysis at the required scale to find relevant information and critical evidence. Quite simply, investigators are faced with too much data without the right tools to quickly analyze the data.

Gang investigations are inherently complex and involve acquiring and analyzing digital data from multiple members and sources and identifying and connecting gang networks to understand their hierarchies and relationships.

Digital evidence from multiple mobile devices needs to be correlated to each case and often there are hundreds of digital devices in a single case. All of this can slow down investigations and lead to valuable evidence being missed or discovered too late in the investigation.

In order to face the challenges of today's gangs, law enforcement needs to take advantage of the latest innovations in analytics technology. Digital intelligence empowers investigators to quickly unlock devices and capture and analyze data with AI and machine learning to identify gang members, networks, relationships and patterns. This information can then be easily shared across agencies, jurisdictions and borders.



With the right digital intelligence solutions, agencies can move from a backlog of individual crimes to identifying and prosecuting the gangs behind them.

Cellebrite digital forensic solutions for gang investigations

Cellebrite offers end-to-end digital intelligence solutions that accelerate gang investigations to keep communities safe. Investigators can quickly access and analyze large volumes of data from multiple sources – digital devices, social media and call records – to identify connections between gang members.

The Cellebrite Difference

Cellebrite digital intelligence solutions reduce the time required to identify and build profiles of gangs and their members and make it easy to share digital evidence with the investigative team and prosecutors. Investigators are able to focus more resources on combatting the entire gang network and prosecutors are presented with forensically sound evidence that will stand up in court.

Unlocking

- Unlock and extract all available data from encrypted devices including the latest iOS and Android devices
- Disable PIN, pattern or password screen locks

Collection and Analysis

- Unify large volumes of data sources to quickly reveal gang networks
- Gather intel from known social media accounts
- Visualize gang member connections and map hot spot locations
- Automate categorization and analysis of media files for quick identification
- Tag and share findings to collaborate across jurisdictions and borders



How Cellebrite digital intelligence can help law enforcement dismantle a gang



In this fictional example, a young man suspected of being in an international gang is arrested for possession of stolen goods. He refuses to provide any details on his fellow gang member, but police confiscate 3 mobile devices from him.



- 1 In analyzing the data on the phones, investigators determine that the suspect is, in fact, in the gang.



- 2 Using Cellebrite digital analytics, the investigators pinpoint the exact location where a considerable amount of contraband is being stored. Upon obtaining a court order to search the location, the police are able to arrest 12 gang members and recover nearly \$1 million in stolen goods and narcotics.



- 3 Seized from the 12 gang members are 42 mobile phones. With Cellebrite digital forensic and analytic tools, the investigative team converge all of the mobile data to identify the entire gang and their international contacts.



- 4 Within 6 weeks, the police department goes from a single arrest of a low-level gang member to breaking up the entire gang. In all, over 100 arrests are made with charges ranging from possession of drugs, intent to distribute, possession of stolen property, money laundering, tax evasion and conspiring to commit murder.



- 5 Cellebrite's end-to-end digital intelligence solutions enable law enforcement to take the entire gang down, saving millions of dollars and thousands of man-hours while allowing his team to focus on keeping the community safe.

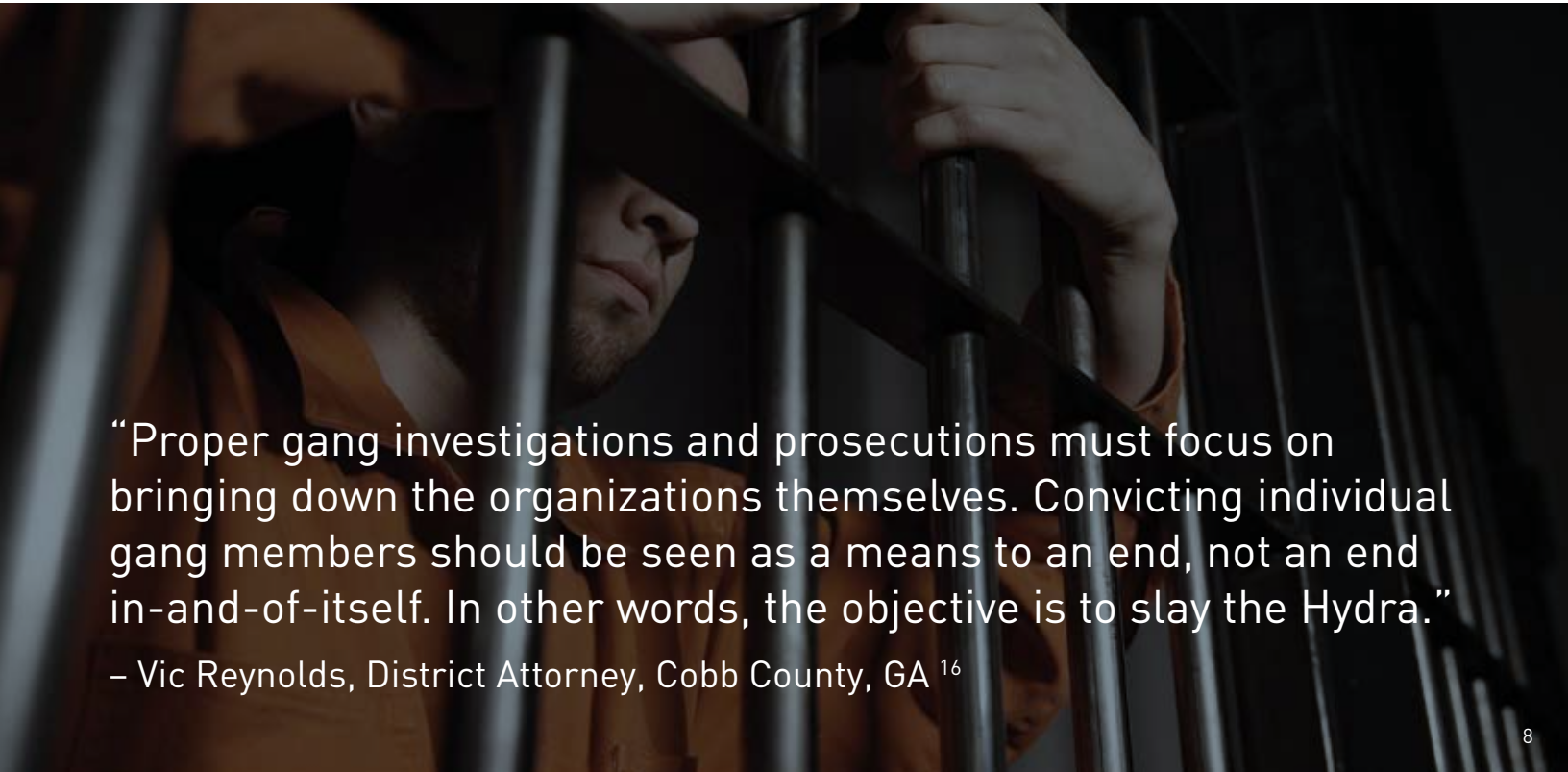
Cellebrite digital intelligence solutions help law enforcement make the community safer by solving gang crimes faster

Cellebrite products include the following features to accelerate investigations and help investigative teams build the most forensically sound cases:

- **Unlocking, extraction, and decryption** of data from more mobile devices than anybody in the industry
- **Automated collection** and review of data from social media and cloud-based sources that provides efficient monitoring of gang-related posts
- **Unparalleled, quick access** to the widest variety of phone profiles and data sources (cloud, apps)
- **Automated correlation** and analysis of disparate data to visually map crime rings, reveal gang criminal activity and uncover connections
- **Centralized data** and dynamic reporting capabilities enabling agencies to share information and collaborate on fighting large organized crime networks
- **Defensible processes** and court-proven forensically sound methods to access, examine, analyze data that can stand up in court

"I can say it took around 2 months' work for one investigator to review and identify evidence that we located in Cellebrite Analytics in around 10 minutes."

Digital Forensic Analyst, Australian Agency

A photograph of a man with a beard, wearing an orange jumpsuit, looking through vertical metal bars. His hands are visible, gripping the bars. The background is dark and out of focus.

"Proper gang investigations and prosecutions must focus on bringing down the organizations themselves. Convicting individual gang members should be seen as a means to an end, not an end in-and-of-itself. In other words, the objective is to slay the Hydra."

– Vic Reynolds, District Attorney, Cobb County, GA ¹⁶

End Notes

- ¹ <https://abcnews.go.com/TheLaw/FedCrimes/story?id=6773423&page=1>
- ² https://www.policechiefmagazine.org/wp-content/uploads/PoliceChief_March-2018_F2_WEB.pdf
- ³ http://www.policeforum.org/assets/docs/Critical_Issues_Series/gang%20violence%20-%20the%20po-lice%20role%20in%20developing%20community-wide%20solutions.pdf
- ⁴ www.theguardian.com/uk-news/2017/mar/09/more-than-5000-criminal-gangs-operating-in-europe-warns-Europol
- ⁵ www.fbi.gov/file-repository/national-gang-report-2015.pdf/view
- ⁶ <http://www.smallarmssurvey.org/fileadmin/docs/A-Yearbook/2010/en/Small-Arms-Survey-2010-Chapter-03-EN.pdf>
- ⁷ <http://lawofficer.com/archive/digital-evidence/>
- ⁸ <https://www.citylab.com/equity/2012/07/inside-weird-world-tracking-gangs-social-media/2734/>
- ⁹ <https://www.independent.co.uk/news/uk/crime/london-gangs-newham-tower-hamlets-attack-beating-video-footage-police-arrests-teenagers-a7348851.html>
- ¹⁰ http://www.nj.com/news/index.ssf/2011/10/as_gangs_adopt_web_20_to_talk.html
- ¹¹ <https://www.nationalgangcenter.gov/Content/Documents/Gang-Prosecution-Manual.pdf>
- ¹² <http://www.govtech.com/public-safety/how-social-media-is-changing-law-enforcement.html>
- ¹³ <https://www.cnn.com/2012/08/30/tech/social-media/fighting-crime-social-media/>
- ¹⁴ <https://news.vice.com/article/the-kids-arrested-in-the-largest-gang-bust-in-nyc-history-got-caught-because-of-facebook>
- ¹⁵ <https://techcrunch.com/2017/02/22/eff-half-the-web-is-now-encrypted/>
- ¹⁶ www.merionwest.com/2018/02/20/combating-americas-gang-crisis-best-practices-and-legislative-imperatives/