# SURVEILLANCE TECH

## MASS SURVEILLANCE
## ALPR'S
## WAR DRIVING

PRESENTED BY

DEFLOCK JOPLIN
FLOCK OUT SGF

# MICHAEL
## DEFLOCK JOPLIN

- B.S. Computer Forensics
- 10+ years corporate IT experience
- DeFlock Joplin - Records, research, detection
- National Week of Action Planning

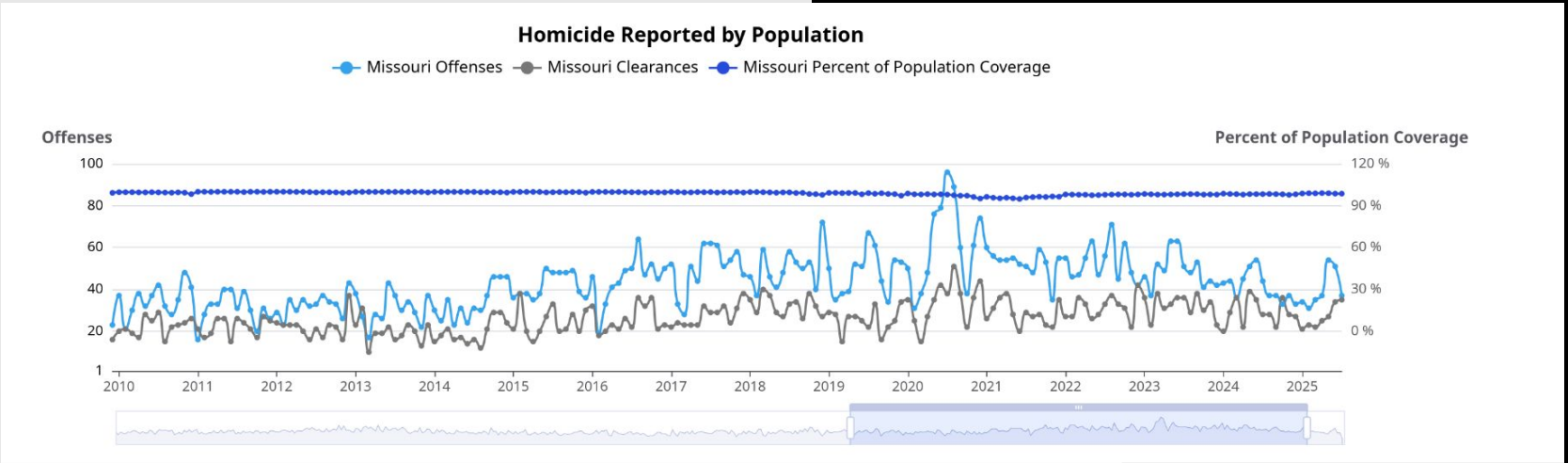
# TRACI
## FLOCK OUT SGF

- B.S. Cybersecurity, M.S Cybersecurity
- 10+ years corporate IT experience
- National Week of Action Planning
- Helped draft infamous resolution





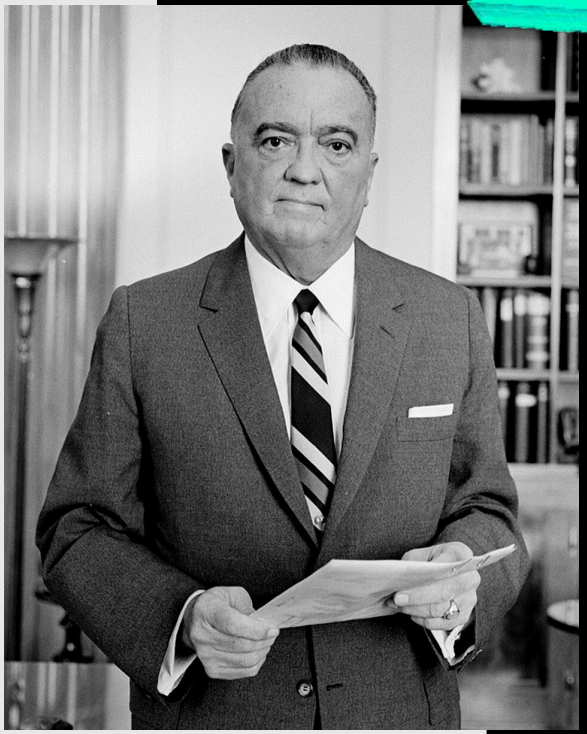

# CRIME RATES

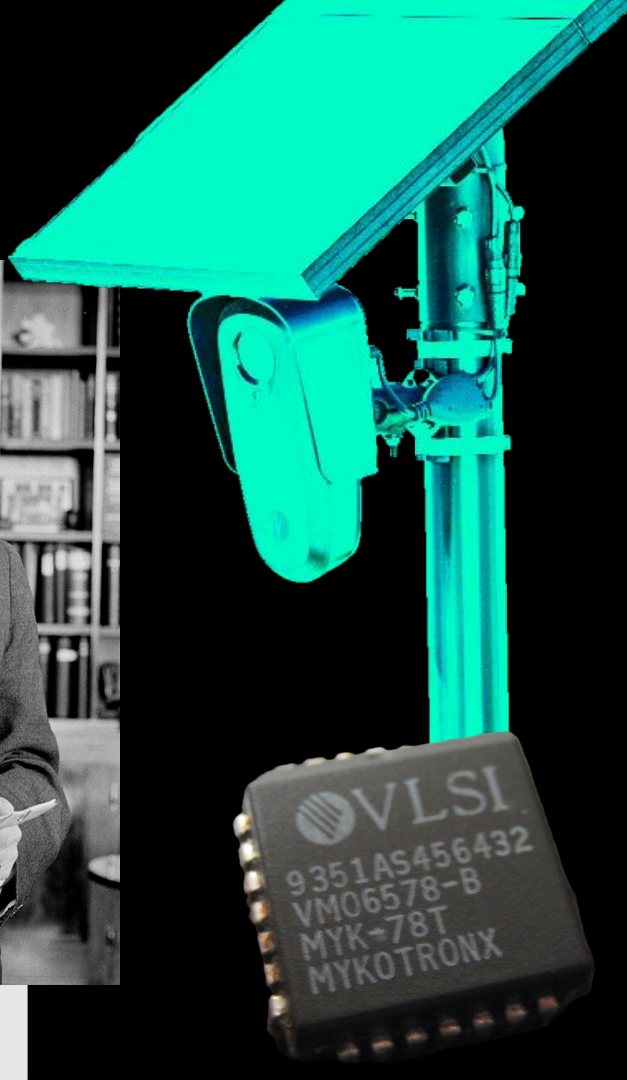



MISSOURI CRIME RATES ‘10 - ‘25

# AGENDA

- ➔ POST 9/11
- ➔ META DATA
- ➔ ALPR'S
- ➔ FUSUS
- ➔ FUSION/RISS CENTERS
- ➔ SPRINGFIELD/JOPLIN
- ➔ WAR DRIVING
- ➔ DEMO
- ➔ ADVOCACY





# POST 9/11

# POST 9/11

October 25: Act passed the House by a vote of 357–66

October 25: Act passed the Senate with a vote of 98–1.

‘01: Patriot Act expands surveillance powers

‘02: DHS created, homeland security becomes permanent

‘05: REAL ID standardizes identity systems

‘08: FISA Amendments Act / Section 702 expands internet-era intelligence surveillance

‘10s: Local police adopt ALPRs, facial recognition, Stingrays, drones, and real-time crime centers

‘13: Snowden disclosures reveal NSA bulk and internet surveillance

‘15: USA FREEDOM Act limits one form of bulk phone metadata collection

”Metadata absolutely tells you everything about somebody’s life. If you have enough metadata, you don’t really need content.”

Stewart Baker

Former NSA General Counsel

# METADATA

## DATA ABOUT DATA

- ➔ Who you are
- ➔ Where you are
- ➔ Who you talk to
- ➔ What you do online
- ➔ When & how often you do it

## AI ENHANCED

- ➔ Can create a detailed picture of a person's life
- ➔ AI can analyze data at scale to identify patterns humans would not easily see
- ➔ Where someone works, what church they attend, what doctor they are seeing, if they attended a protest, or where they spend the night

# SIGNALTRACE

- ➔ “Integrated Signal Intelligence System” for law enforcement
- ➔ Designed to go beyond license plate reads by detecting signals emitted by consumer electronic devices such as phones, smartwatches, fitness trackers, and RFID tags
- ➔ Creates an “electronic fingerprint” by grouping devices that routinely appear together, then it correlates those patterns with time, location, and license plate reader data



# ALPR's

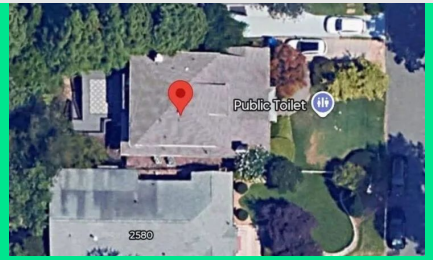
AUTOMATIC LICENSE PLATE READERS

## EARLY SYSTEMS

- ➔ Automatic number-plate recognition (ANPR) invented in 1976 in Britain
- ➔ Prototypes and contracts awarded in 1979
- ➔ Limited by camera quality, storage costs, and local database access
- ➔ Were not widely in use until the 1990's
- ➔ Used optical character recognition (OCR)

## NOW

- ➔ Owned by private companies
- ➔ Use AI
- ➔ Cloud-based storage
- ➔ Can collect data from police cameras, patrol cars, private businesses, neighborhoods, HOAs, parking lots, schools, and other private camera networks
- ➔ Allows retroactive searches to create a pattern of life
- ➔ Can be shared across cities, counties, states, fusion centers, federal agencies, and vendor networks






# FUSUS

Enables police to link security cameras, automated license plate readers, doorbell cameras, police dash cameras, drones, and body-worn cameras to a central hub that can use AI

- ➔ May ‘23 EFF reported 150 jurisdictions use FUSUS
- ➔ Now 324 U.S. communities - 624,000 cameras connected
- ➔ 275,159 cameras in Georgia
- ➔ 802 cameras in Missouri
- ➔ Registered cameras are in a police-maintained database to create a network map for future investigations
- ➔ Integrated cameras give live access to police
- ➔ Video streams can be shared with other agencies



# FUSION CENTERS

PIPELINE TO THE FEDS

## FUSION CENTERS

- ➔ Expanded after 9/11
- ➔ Funded by the Federal Government
- ➔ Share information between police, sheriffs, FBI, DHS, emergency management, and other agencies
- ➔ Combine many data sources including police reports, ALPR data, social media tips, gang databases, terrorism watchlist information, school threats, critical infrastructure reports, and private-sector reports

- ➔ ‘09 MIAC Report flagged third-party voters, Ron Paul supporters, anti-abortion activists, and conspiracy theorists as potential militia indicators
- ➔ ‘09 Virginia Fusion Center report identified some universities as possible terrorism hubs. Report specifically flagged historically Black colleges
- ➔ The Intercept found that fusion centers were actively involved in monitoring pro-Palestine demonstrations on at least five campuses across the country, as shown in more than 20,000 pages of documents obtained via public records requests

The Privacy Office has identified a number of risks to privacy presented by the fusion center program:

- ➔ Justification for fusion centers
- ➔ Ambiguous Lines of Authority, Rules, and Oversight
- ➔ Participation of the Military and the Private Sector
- ➔ Data Mining
- ➔ Excessive Secrecy
- ➔ Inaccurate or incomplete Information
- ➔ Mission Creep

# RISS

## RISS

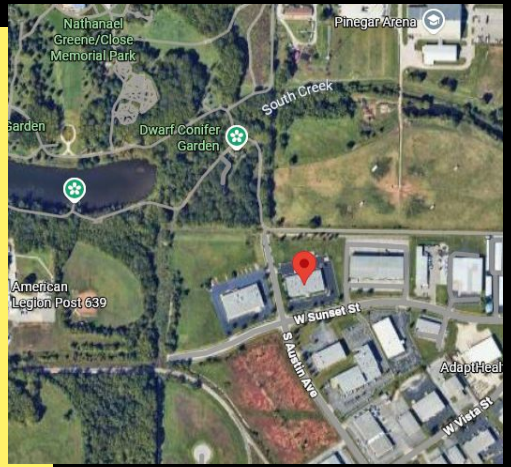
Regional Information Sharing Syste

- ➔ Older network, started in the 1970s
- ➔ Federally funded through DOJ/BJA
- ➔ Serves law-enforcement and criminal justice member agencies
- ➔ Organized into six regional centers, including MOCIC

## MOCIC

Mid-States Organized Crime Information Center

- ➔ Located in Springfield, Missouri
- ➔ Administered by the U.S. DOJ Bureau of Justice Assistance (BJA)
- ➔ Locally managed
- ➔ Governed by a policy board made up of law-enforcement member agencies in its region
- ➔ Serves Illinois, Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota, Wisconsin, and parts of Canada





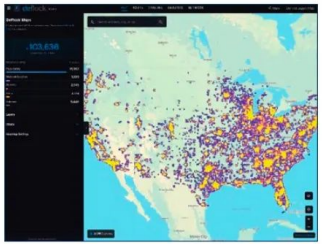

# WEEK OF ACTION

## Intelligence Bulletins

- ➔ Stated DeFlock was calling for the destruction of ALPR cameras
- ➔ Colorado Information Analysis Center 07/26 issued a bulletin for National Week of Action
- ➔ Bulletin from the North Florida Fusion eXchange notes 11 cities in Florida that “have already signed up to participate.”
- ➔ Wisconsin Statewide Intelligence Center “On June 25th, 2026 University of South Florida Police Department located a device during a traffic stop that could be used to identify the locations of Flock cameras..”

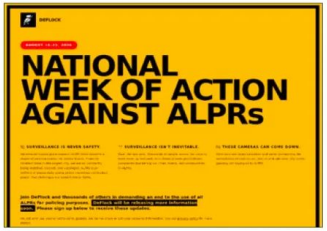
- **(U) Host of “DeFlock America” Facebook Page:**
  - (U) An identified individual, who appears to live in Alaska, is the host of the “DeFlock America” on June 26, 2026.
- **(U) 4th of July DeFlock Movement Facebook Page:**
  - (U) An identified individual, who appears to live in Wisconsin, is advertising a 4th of July event encouraging individuals to take down flock cameras.
- (U) **DeFlock Website**: https://deflock.org/



(U//LES) SOURCE: NJSP ROIC

- (U) The DeFlock website has posts regarding the opposition of ALPRs.
- (U) There are approximately 107,533 cameras identified and mapped on the website.
- (U) A hyperlink includes an advertisement about the “National Week of Action Against ALPRs”: https://noalprs.com/
  - (U) This event is taking place from August 16-22, 2026.
  - (U) The page says that it will be releasing more information soon about the event.




- (U) **DeFlock Me Instagram Page**: https://www.instagram.com/deflock.me/
  - (U) This page has 1,265 followers.

(U//LES) SOURCE: NJSP ROIC

Page 3 of 15
WSIC Distribution Date: July 3, 2026
UNCLASSIFIED // LAW ENFORCEMENT SENSITIVE

*Wisconsin State Wide Intelligence Center*

# SPRINGFIELD

## FLOCK

- 41 Cameras
- Funded with Blue Shield Grant from the Missouri Department of Public Safety
- Shares data with 471 other agencies. Receives data from 501
- 5 year contract starting in ‘25 at $45k year

## SKYDIO

- Drone As a First Responder (DFR) program
- Integrates with Axon
- Implemented in ‘25
- 2 rooftop docks
- $375k for each dock

## AXON

Body Cameras

- Cloud evidence storage and management through Axon Evidence
- Automatically creates a draft police report
- Initial cost of $5.3 million paid through vacant officer jobs, and federal forfeiture money
- The contract is automatically renewable for nine years
- Total cost for 10 years is $16M+

FUSUS

- Implemented in ‘25
- 21 Registered cameras
- 313 Integrated cameras
- “Will also serve as the backbone of a staffed Real Time Information Center (RTIC) in the future”

## CLEARVIEW AI

- Matches faces to a database of more than 70 billion images collected from the Internet, including social media application
- Contracted with ICE
- Funded with Edward Byrne Memorial Justice Assistance Grant from the DOJ
- $49,375 year

# JOPLIN

## FLOCK

- 12 cameras
- Funded with sales tax revenue
- No council vote
- No Public Comment

## AXON

- In talks for Drone as First Responder
- 2 drones. 5 Years. Over $1 million
- Demo'd DFR for two weeks and was not disclosed
- "Whole city" asset conflicts with "emergency only" policy

## CELLEBRITE

- In talks for Inseyets
- Mobile forensics
- Android easily unlocked
- iPhone harder
- Graphene hardest

# OTHER SURVEILLANCE TECH BRANDS

Motorola



Cellebrite



Genetec



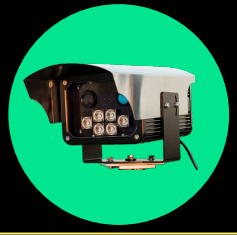
Verkada



Ring



Leonardo



Rekor



# WAR DRIVING

## COUNTER-SURVEILLANCE

# WHAT IT ISN'T

- ➔ Hacking

# WHAT IT IS

- ➔ Originally for finding open Wi-Fi networks
- ➔ Named after WarDialing from the movie WarGames
- ➔ Turns wireless signals into location data
- ➔ Can map homes, businesses, schools, and buildings by their Wi-Fi and Bluetooth signals
- ➔ Can be used for research, mapping, troubleshooting, or **authorized** security testing

## What it can reveal

- ➔ Network name / SSID
- ➔ Business or household names
- ➔ Router MAC address
- ➔ Physical location
- ➔ Signal range
- ➔ Encryption type
- ➔ Whether a network is open or secured



# TOOLS USED






seeed studio
Model:XIAO-ESP32-C5
FCC ID:Z4T-XIAOESP32C5
217-252850


LILYGO


Hey m8, press ↑ to continue
FLIPPER




Mountain View
Partly cloudy
58°
Feels like 58°
High 78° · Low 60°
AI Weather Report
Mild, slightly humid morning with pleasant temperatures expected throughout the day and strong sunshine around midday.
Weather insight
Tomorrow's temperature will be 6° lower
Hourly forecast

# COUNTER-SURVEILLANCE
## WHY WE DO IT

SNOOP UNTO THEM,
AS THEY SNOOP UNTO US




- ➔ Lord Nikon - Fingerprint them back
- ➔ Demonstrate that it's possible, in both directions
- ➔ Network security

- ➔ Propaganda of action and mapping
- ➔ Situational Awareness
- ➔ WDGWars
- ➔ Wigle mapping

- ➔ They don't like it

**From:** Pearson, Richard <RPearson@joplinmo.org>
**Sent:** Thursday, August 15, 2024 10:42 AM
**To:** Onstot, Lynn <LOnstot@Joplinmo.org>; Lewis, Brian <blewis@joplinmo.org>; Davis, William <WDavis@Joplinmo.org>; Stump, Jason <JStump@Joplinmo.org>; Delzell, Jared <JDelzell@Joplinmo.org>
**Cc:** Douglas, Drew <DDouglas@joplinmo.org>
**Subject:** Re: Facebook question re: Flock cameras

Lynn, is there a link to respond to this inquiry? Our response is that the location of the Flock cameras provides JPD with information that we use in real-time to apprehend offenders and recover property. The location of these cameras is of tactical importance and their locations will not be made public.

Richard Pearson
**Chief of Police**
303 E 3rd St
Joplin, MO 64801
phone: 417-623-3131 Ext. 1401
email: RPearson@joplinmo.org
web: JoplinMo.org

JOPLIN
POLICE DEPARTMENT

# FLOCK COUNTER-SURVEILLANCE

## A BRIEF HISTORY

- ➔ Pre December 2025: Flock cameras were often, but not always, broadcasting a wifi signal that you could see on your phone like any other Wi-Fi network. This was turned off near the end of 2025

- ➔ Community device firmwares were able to continue looking for devices using bluetooth. This quit working reliably in the Spring of 2026 after changes by Flock.  Works sometimes still

- ➔ Shortly after bluetooth detection became unreliable, @NitekryDPaul/Ordo noticed different wifi activity coming from Flock cameras

# Flock Counter-Surveillance

## WHAT IS IT?

After Ordo noticed Wi-Fi activity, I began looking further and performing packet captures.

What did we find?

- ➔ OUIs not enough. False positives.
- ➔ Wifi Probes: What is their Purpose? Why were they sending them?
- ➔ Information Element Fields
- ➔ Source of inspiration: Pintor, Lucia & Atzori, Luigi. (2022). Analysis of Wi-Fi Probe Requests Towards Information Element Fingerprinting. 3857-3862. 10.1109/GLOBECOM48099.2022.10001618
- ➔ Contributed to Colonel Panic
- ➔ New update - Started in late July. Flock has disabled most detectable signals

# DEMO

# WHAT CAN WE DO?

## COUNTERMEASURES

- ➔ Adversarial Patterns
- ➔ Reflective coatings
- ➔ Coverings
- ➔ Legal?

## ADVOCACY

- ➔ Local cancellations
- ➔ Local bans
- ➔ State Bans
- ➔ National Ban?
- ➔ Regulation?

## AVOIDANCE

- ➔ Comaps fork
- ➔ DeFlock App
- ➔ FlockHopper
- ➔ Viable?

# PARTING THOUGHTS

Rhetorical Ammunition

- ➔ No expectation of privacy in public?
- ➔ Carpenter 2018 : Right to privacy in the whole of your physical movements
- ➔ Chatrie 2026 : Legitimate protected expectation of privacy in cell phone location data
- ➔ Time limits rejected, even short intrusions are a search
- ➔ Third party doctrine weakened.  Just because your data is with Google doesn't mean you give up your expectation of privacy
- ➔ Not applied to Flock yet

# SOURCES

CRIME RATES
FBI Crime Data Explorer

POST 9/11
History of the Patriot Act - Wikipedia

METADATA
Ex-NSA Chief: 'We Kill People Based on Metadata' - ABC News

ALPRS
Automatic number-plate recognition - Wikipedia
An Introduction to ANPR - CCTV Information
Let's Talk About the Flock Study That Says It Solves Crime

FUSUS
As resistance to Flock cameras swells, Fusus surveillance networks spread
Neighborhood Watch Out: Cops Are Using Fusus to Incorporate Private Cameras Into Their Real-Time Surveillance Networks | Electronic Frontier Foundation

FUSION CENTERS
Fusion Center Locations and Contact Information | Homeland Security
Fusion center - Wikipedia
20 years after 9/11, 'fusion centers' have done little to combat terrorism

RISS
Republic Chamber of Commerce
MOCIC – Regional Information Sharing Systems
Regional Information Sharing Systems - Wikipedia

WEEK OF ACTION
The Government is Monitoring Anti-Flock TikTok and Instagram Accounts
Exclusive: Government Spy Hubs Are Surveilling Anti-Flock Camera Activists

SPRINGFIELD
Springfield Police Department's 2025 Annual Report now available

Flock
Research – FLOCK OUT SGF

Skydio
Springfield police drones can beat officers to some 911 calls
Skydio - Axon.com

Axon
New Axon body camera's coming to Springfield Police Department

Clearview AI
Springfield council meeting ends with handcuffs amid Flock frustration
FY2026-2027 Proposed Budget

WARDRIVING
Wigle.net
The Wonderful World of Wardriving: A Deep Dive Into the Science of Mapping the Invisible
watch dogs go wars