

AUTOMATED LICENSE PLATE READER (ALPR) NETWORK AUDIT

Analysis of Flock Group Records Produced Under Public Records Request

New Hanover County Sheriff's Office (Wilmington, NC) — Flock Group, Inc. Contract #25-0364
*Request submitted April 28, 2026 · Records produced June 2026 · Final — June 18, 2026 · Prepared by
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Executive Summary

This report analyzes the Flock Safety records the New Hanover County Sheriff's Office (the "County") produced in response to a public records request concerning its contract with Flock Group, Inc. (Contract #25-0364). The production consisted of an Organization Audit summary and a detailed search log of 2,980,082 individual searches run through the County's Flock automated license plate reader (ALPR) network between January 23, 2025 and June 5, 2026 — roughly sixteen and a half months.

Three findings stand out. First, nearly three million searches touched this network in sixteen months, and a typical single search queried a median of 6,177 separate camera networks at once — a search radius that reaches far beyond the County. Second, every organization name and every officer name in the produced log is redacted, so the records as produced do not show which agencies ran these searches. That redaction also means the agencies the County shares data with, and receives data from, cannot be identified from this production. Third, the County's own searches concentrate heavily in drug enforcement: 37.4% of its Organization Audit searches were coded Drugs/Narcotics, the single largest category by a wide margin.

Scope and Method

The County produced nineteen files: an Organization Audit summary (offense-type breakdown of the County's own searches, January–June 2026) and eighteen detailed search-log files. The eighteen log files are consecutive monthly extracts that, joined together, form one continuous record covering January 23, 2025 through June 5, 2026. They were combined and analyzed as a single dataset. Each row represents one search. The analysis below counts records, tabulates search types and stated reasons, measures how many camera networks each search reached, and documents what the County redacted.

A note on terminology. Flock's Insights tab defines the Organization Audit as searches done within the agency, and the Network Audit as searches of the organization's Flock network by any agency in the Flock system. The detailed log analyzed here corresponds

to the Network Audit — searches running through the County’s network — and dwarfs the County’s own activity. For context, the County’s own searches over January–June 2026 totaled 13,322, while the network log records hundreds of thousands of searches per month at its peak.

Contract Context

The produced contract identifies the customer as the New Hanover County Sheriff’s Office, 230 Government Center Drive, Wilmington, North Carolina 28403, executed with Flock Group, Inc. via DocuSign. Its terms frame the search activity analyzed below.

Contract term	Detail
Customer	NC – New Hanover County Sheriff’s Office (Wilmington, NC)
Vendor	Flock Group, Inc. (Flock Safety)
Initial / renewal term	24 months / 24 months, auto-renewing on 30 days’ notice
Contract total	\$219,000 (\$119,000 Year 1 + \$100,000 annual recurring)
Hardware	28 cameras — 17 Falcon Solar, 3 Solar Falcon LR, 8 Solar Condor PTZ
Platform	FlockOS – Essentials; data retention period 30 days
Special terms	Custom subscription: Fusus API integration

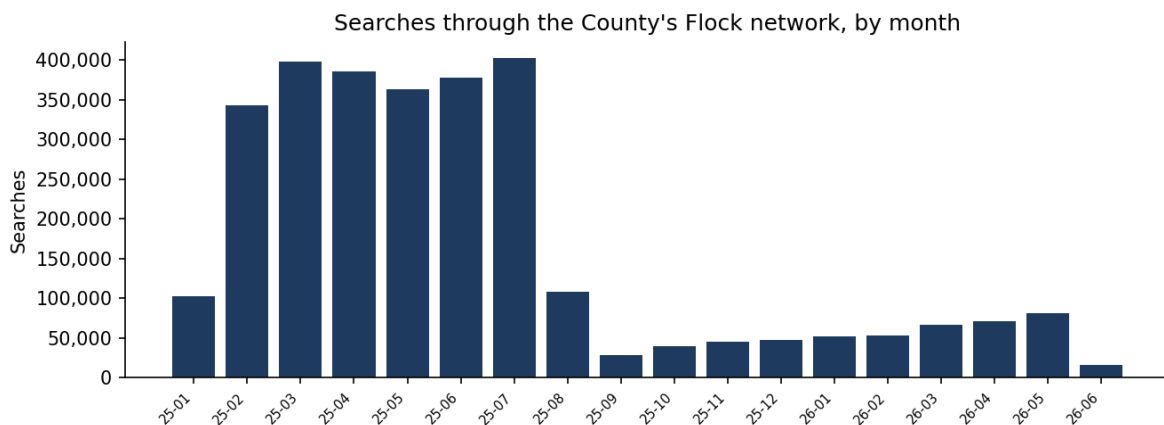
Why one search reaches thousands of networks. The contract enables the State and Nationwide Network (License Plate Lookup), which Flock describes as a “nationwide system boasting 10 billion additional plate reads per month” that lets agencies “look up license plates on all cameras opted into the Flock Safety network.” This is standing, opt-in network access: a participating agency can query the network without a separate, per-search request to New Hanover. That architecture produces the median of 6,177 networks per search documented below. The figure reflects how the purchased features are configured — it is not offered as proof that the volume is itself improper. It matters because both the County’s policy and the statute frame lawful sharing in terms of individualized requests rather than standing access — the question this report returns to. The retention period is set at 30 days, yet the produced search log spans roughly sixteen and a half months.

Network Audit — Overview

Field	Value
Audit type	Network audit (searches through the County’s Flock network)
Timespan	Jan 23, 2025 – Jun 5, 2026 (~16.5 months)
Earliest record	Jan 23, 2025, 4:11 PM UTC
Latest record	Jun 5, 2026, 5:32 PM UTC
Total search records	2,980,082
Organizations identified	0 — all organization names redacted
Officer/user names	0 — all redacted
Median camera networks per search	6,177 (max 7,216)

Reach of a single search. The “Total Networks Searched” field shows how many separate Flock camera networks each query reached. The median search hit 6,177 networks and the largest hit 7,216. In practice, one officer running one search is simultaneously querying thousands of independent agency camera networks across the country, not just the County’s own cameras.

Search volume over time

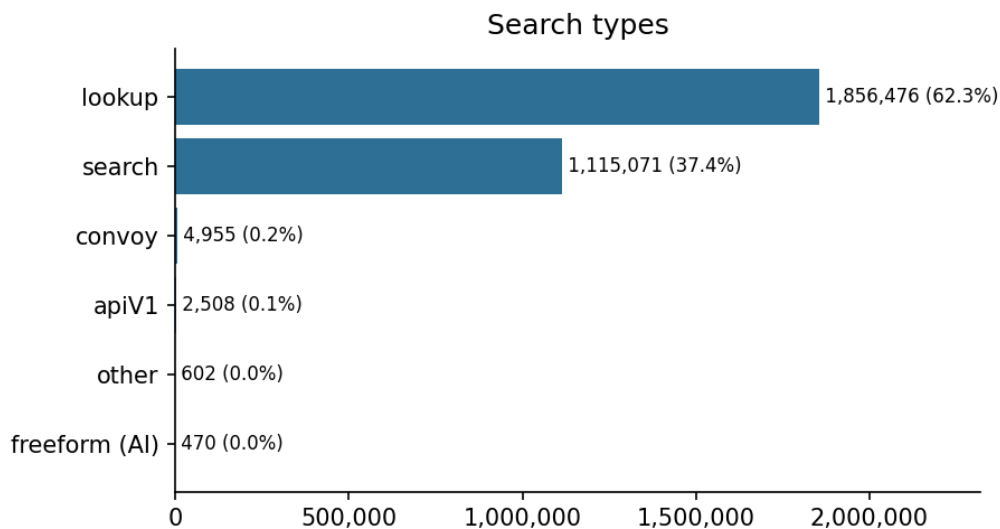


Volume ran between roughly 340,000 and 400,000 searches per month from February through July 2025, then dropped sharply — to between 28,000 and 81,000 per month — from August 2025 onward. This is a substantial and abrupt change in the network log. It may reflect a change in network participation, in what Flock logged or exported, or in the scope of the records produced; the production itself does not explain it. The County is the party able to account for the drop.

Search Types

Flock records the mechanism used for each query. “Lookup” and “search” dominate; “freeform” denotes a natural-language, AI-assisted query described in plain English rather than a plate number (analyzed separately below).

Search type	Count	Share
lookup	1,562,965	52.45%
search	1,013,977	34.03%
lookup – Mobile	293,511	9.85%
search – Mobile	101,094	3.39%
convoy	4,955	0.17%
apiV1	2,508	0.08%
freeform (AI natural-language)	457	0.02%
searchSummary – Mobile	325	0.01%
visual	267	0.01%
freeform – Mobile	13	<0.01%
multiGeo	9	<0.01%
mostSeenOcrValues	1	<0.01%
Total	2,980,082	100%



Human, not automated. Almost all of this activity is interactive and human-initiated. The interactive query types — lookup and search, on desktop and mobile — account for 99.71% of the log; programmatic API access (apiV1) is 0.08%, and every non-interactive

type combined (API, convoy, freeform, visual, multiGeo) is 0.29%. The scale reflects human searches, not automated background polling. A single human search simply fans out across thousands of networks, which is the reach figure described above — a separate axis from how the search was initiated.

Stated Reasons for Searches

Unlike many network-audit productions, this log retains the free-text “reason” entered by the searching officer for nearly every record (99.98% populated). The entries are unstandardized — the same offense appears as “stolen,” “STOLEN,” “Motor Vehicle Theft/Stolen,” and dozens of abbreviations. Grouping them into offense categories produces the distribution below. “Other/Unspecified” and “Investigation (generic)” together account for over half of all searches, meaning a majority carry no specific stated offense.

Offense category (grouped from free text)	Count	Share
Other / Unspecified	1,207,510	40.52%
Investigation (generic)	533,728	17.91%
Wanted / Warrant	199,050	6.68%
Larceny / Theft	179,643	6.03%
Drugs / Narcotics	150,848	5.06%
Stolen property / vehicle	145,028	4.87%
Suspicious / Intel	144,088	4.84%
Traffic	57,647	1.93%
Missing / Endangered	47,141	1.58%
Hit and run / Accident	45,495	1.53%
Motor vehicle theft	44,774	1.50%
Burglary / B&E	37,712	1.27%
Assault / Battery	32,190	1.08%
Robbery	30,301	1.02%
Homicide / Death	23,247	0.78%
Weapons / Shots fired	22,772	0.76%
All remaining categories	78,908	2.65%

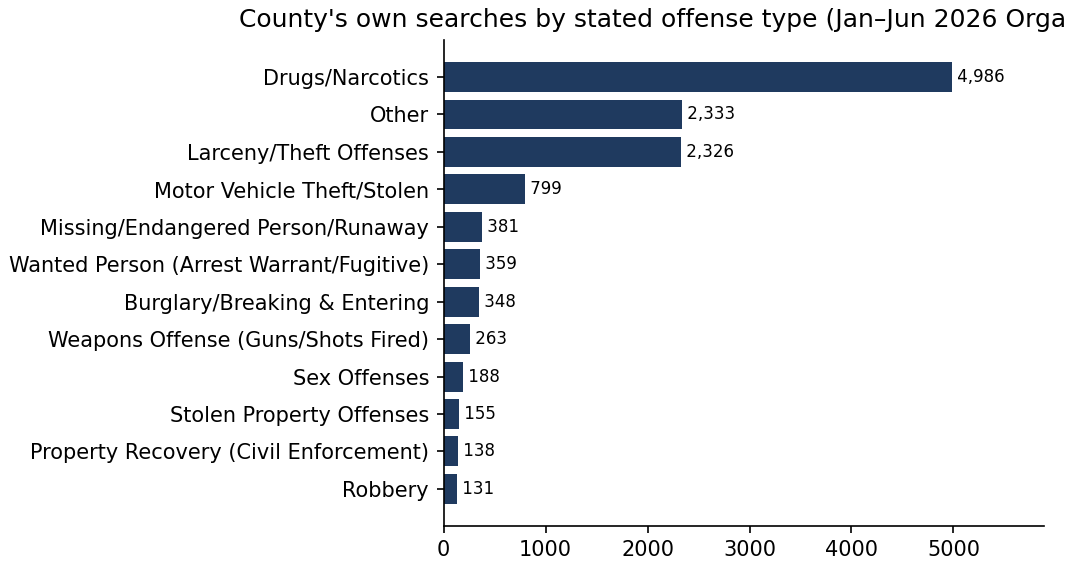
How to read this. These categories are reconstructed from inconsistent free text and are approximate; the “reason” field is a weak proxy, and an officer’s fuller justification

may live in a separate case or records-management system not produced here. The defensible reading is therefore narrower than “no justification existed.” It is this: within the produced log itself, a majority of searches carry no specific, structured offense or case reference. That is a documentation-completeness observation about the record — not a finding about any officer’s actual purpose.

Organization Audit — the County’s Own Searches

The Organization Audit summary covers the County’s own searches from January through June 2026: 13,322 searches across 41 offense categories. Drug enforcement is the dominant use. Drugs/Narcotics alone accounts for 37.4% — more than the next two categories combined — followed by a generic “Other” category and Larceny/Theft.

Offense type (as coded by Flock)	Searches	Share
Drugs/Narcotics	4,986	37.4%
Other	2,333	17.5%
Larceny/Theft Offenses	2,326	17.5%
Motor Vehicle Theft/Stolen	799	6.0%
Missing/Endangered Person/Runaway	381	2.9%
Wanted Person (Warrant/Fugitive)	359	2.7%
Burglary/Breaking & Entering	348	2.6%
Weapons Offense (Guns/Shots Fired)	263	2.0%
Sex Offenses	188	1.4%
Stolen Property Offenses	155	1.2%
All remaining 31 categories	1,184	8.9%
Total	13,322	100%



AI Natural-Language Searches

The log contains 470 “freeform” searches (304 distinct queries) that describe a vehicle in plain English rather than by plate number. Flock’s system then searches its national footage for matches. These queries show officers asking the network to find vehicles by appearance alone:

"objectClass:vehicle older model black Porsche Macan with temporary plates and a sticker to the left of the license plate and a trailer hitch"

"objectClass:vehicle black Porsche SUV with temporary paper license plates, possibly "4823333Z". show only vehicles with paper tags"

"objectClass:vehicle white silverado service body with igloo cooler in bed"

"objectClass:vehicle white chevrolet camaro with a black spoiler"

"objectClass:vehicle large white ford pickup with dark blue trailer"

"objectClass:vehicle Pickup Truck with no License plate"

All 470 freeform searches were tagged “allow” by Flock’s content moderation. Across the entire 2.98-million-record log, moderation flagged almost nothing: 458 “allow,” 11 “block,” and a single “warn.” The remaining 99.98% of searches carry no moderation entry at all.

Redaction in the Production

What the County withheld defines what this production can and cannot show:

Field	Status in produced records
License plate	100% redacted ("****") or blank — no plate is readable
Officer / user name	100% redacted
Organization name	100% redacted — no searching agency identified
Case number	Redacted or blank in essentially all rows
Filters	Redacted in ~57% of rows
Reason	Populated in 99.98% of rows (free text retained)
Search time, type, network count	Fully populated

The pattern is unusual. Many network-audit productions redact reasons and case numbers but leave organization names visible — that is how published analyses have identified, for example, out-of-state agencies searching a North Carolina network. This production does the reverse: it preserves the stated reasons but redacts every organization and officer name. The result is a detailed picture of why searches were run and how far they reached, with no way to determine who ran them from the records alone.

Sharing and Receiving Agencies — Request Item Outstanding

The request asked for four lists: the agencies the County shares ALPR data with, the agencies it receives ALPR data from, and the same two lists for "hot list" information. Because every organization name in the produced log is redacted, none of these relationships can be derived from the records produced. If the County provided these lists in a separate document, they should be analyzed alongside this report; if it did not, the four list items remain outstanding and are an appropriate subject for follow-up or a supplemental request. The median search reaching 6,177 networks confirms the County's network is broadly interconnected — the production simply does not name the participants.

Statutory & Policy Compliance — N.C. Gen. Stat. Article 3D and SOP 222

This section maps the records produced against the two standards that govern New Hanover County’s ALPR program: N.C. Gen. Stat. Chapter 20, Article 3D (§§ 20-183.30 to 20-183.33), and the Sheriff’s Office Standard Operating Policy 222, Automatic License Plate Readers (effective December 9, 2024). It identifies where the produced data and these standards are in tension. It is an analysis of fit between the records and the rules — not a legal opinion, and not a finding that any violation occurred. Because every organization and officer name in the produced log is redacted, the data can show the scale and pattern of activity but cannot establish who ran any search or whether a required written request existed.

Governing standards

The statute. Article 3D limits ALPR data to a defined “law enforcement purpose” and bars its use “for the enforcement of traffic violations” (§ 20-183.31(b)); confines that purpose to criminal investigation, apprehending a person with an outstanding felony warrant, locating a missing or endangered person, or locating a lost or stolen vehicle (§ 20-183.30(5)); makes captured plate data confidential and not a public record, disclosable only to a criminal justice officer for a legitimate law-enforcement purpose pursuant to a written request, and never sold (§ 20-183.32(e)); caps retention of captured plate data at 90 days absent a preservation request or warrant (§ 20-183.32(a)); and makes a violation a Class 1 misdemeanor (§ 20-183.33).

The policy. SOP 222 adopts those limits and adds operational gates: access to ALPR-generated data “is restricted to NHCSO employees” (222.5.D); data may be shared with another agency only upon a written or electronic request to the ALPR manager stating the investigative report number, the type of crime, the person of interest, and the vehicle registration sought, which the manager reviews, approves, and records (222.3.F); all outside-access requests must be routed to the ALPR manager for approval (222.4.A.8); the access system must document “who accessed the information by identity, date and time” (222.5.D.2.c); the program manager must conduct, retain, and forward annual audits to the Sheriff (222.4.A.9); and ALPR data “shall not be used for the enforcement of traffic violations” (222.3.D.6).

How the produced data maps to the standards

Each row separates the observation (what the produced data shows) from the assessment (how it relates to the rule, and what unproduced record would resolve it). No row is a finding that a violation occurred; innocent explanations are noted where they apply.

Requirement	What the produced data shows	Assessment
<p>Disclosure only on a written request, reviewed and approved by the ALPR manager, and recorded (§ 20-183.32(e); SOP 222.3.F, 222.4.A.8, 222.5.A)</p> <p>Access restricted to NHCSO employees; outside agencies only by approved request (SOP 222.5.D, 222.4.A.8)</p>	<p>≈2,980,082 searches ran through the County's network; a single search reached a median of 6,177 outside camera networks via the contract's standing, opt-in Nationwide Network access.</p> <p>The network audit reflects searches of the County's cameras by outside networks at scale, not confined to NHCSO users.</p>	<p>Open interpretive question (see case law below): whether § 20-183.32(e)'s "written request from the requesting agency" permits standing, network-wide access or requires a per-disclosure request. The data shows standing-access scale; it cannot show who searched.</p> <p>Significant tension with the policy's access restriction; resolution depends on the manager's request records.</p>
<p>Sharing request must state crime type and case data (SOP 222.3.F.1)</p>	<p>58%+ of searches carry only "Other/Unspecified" (40.5%) or generic "investigation" (17.9%); the case-number field is redacted or blank in essentially all rows.</p>	<p>Gap in the produced records: the crime-type/case documentation the policy conditions sharing on is not shown.</p>
<p>Use limited to defined law-enforcement purposes; no traffic enforcement (§ 20-183.31(b), § 20-183.30(5); SOP 222.3.D.6)</p>	<p>The County's own audit codes 13 searches "Traffic Infraction," plus DUI/DWI (32) and reckless/road-rage (55); network-wide "Traffic" ≈57,647. Hit-and-run and fled-from-stop are policy-permitted hotlist categories.</p>	<p>Minor but facial concern for the "Traffic Infraction"-coded searches; DWI/reckless and hit-and-run entries are defensible as criminal.</p>
<p>Warrant searches limited to felony warrants (§ 20-183.30(5)b; SOP 222.2.G)</p>	<p>"Wanted/Warrant" reasons: ≈199,050 network-wide; 359 in the County's own audit. Felony vs. misdemeanor is not distinguishable in the data.</p>	<p>Cannot assess from the produced records.</p>
<p>Captured plate data purged at 90 days (§ 20-183.32(a); SOP 222.5.B)</p>	<p>The produced log is a search/audit record spanning ~16.5 months — not captured plate data. The contract sets plate-data retention at 30 days.</p>	<p>No violation shown. The 90-day cap governs plate reads, not audit logs.</p>
<p>Identity-level access logging; annual audit</p>	<p>The log demonstrates the system records each search; identities were redacted in</p>	<p>Logging capability is evident; compliance</p>

Requirement	What the produced data shows	Assessment
to the Sheriff (SOP 222.5.D.2.c, 222.4.A.9)	the production. No annual audit report was included.	turns on documents not produced (see below).

North Carolina case law — a question of first impression

Whether standing, network-wide sharing satisfies § 20-183.32(e), or whether the statute requires an individualized, per-agency written request for each disclosure, has not been decided in North Carolina. A review of North Carolina case law — published and unpublished Court of Appeals decisions — found no opinion construing Article 3D, citing §§ 20-183.30 through 20-183.33, or using the phrase “captured plate data.” North Carolina decisions do mention license plate readers as a matter of fact — the unpublished decision *State v. Warren* (N.C. Ct. App. 2026) notes that “a license plate reader alerted police” to a stolen vehicle — but none analyzes Article 3D, the disclosure or retention rules, or the network-sharing question, and such references are unpublished and non-controlling. The statutory question therefore appears to be one of first impression in this State.

No North Carolina case therefore supports or forecloses either reading. A court reaching the question would construe the statutory text and the 2015 and 2023 legislative history against the Fourth Amendment backdrop, where the closest authority is persuasive rather than directly on point: *Carpenter v. United States*, 585 U.S. 296 (2018), limiting the third-party doctrine for pervasive digital-location data; and *Leaders of a Beautiful Struggle v. Baltimore Police Department*, 2 F.4th 330 (4th Cir. 2021) (en banc), holding that prolonged, aggregated surveillance can be a search — the Fourth Circuit governs North Carolina’s federal courts. Neither construes § 20-183.32, and both address constitutional rather than statutory limits.

Records that SOP 222 requires and that would resolve the open questions

Because the policy states these records must exist, they are the appropriate subject of a follow-up or supplemental request. Each would either confirm compliance or define the gap:

- The ALPR manager’s records of written sharing requests from outside agencies (SOP 222.3.F.3) — the requests and approvals that should correspond to outside-agency searches of the County’s cameras.

- The annual ALPR audits forwarded to the Sheriff (SOP 222.4.A.9), which must list access, additions, and searches of the scan file to verify data security and policy compliance.
- The identity-level access logs (SOP 222.5.D.2.c) — the unredacted log of who accessed the data, by identity, date, and time.
- The agency's written ALPR use policy as adopted under § 20-183.31(a), confirming the databases, retention, sharing, training, oversight, security, and auditing terms.

Bottom line. The produced records do not prove a violation of Article 3D or SOP 222, and the redaction of every searcher's identity forecloses that conclusion on this data alone. What the records support is narrower and turns on an unresolved legal question: the County's ALPR data is queried through standing, network-wide access — the architecture the contract bought — while both the statute and SOP 222 frame lawful sharing in terms of individualized, manager-approved, documented requests. Whether those can be reconciled is undecided in North Carolina. The records SOP 222 requires the County to keep — the manager's written-request log, the annual audits, and the identity-level access logs — would show which way the practice actually runs, and are the natural targets of a follow-up or supplemental request.

Key Findings

- 2,980,082 searches ran through the County’s Flock ALPR network in roughly sixteen and a half months (Jan 23, 2025 – Jun 5, 2026).
- A typical single search queried a median of 6,177 separate camera networks; the largest reached 7,216 — a national, not local, search radius.
- Every organization name and officer name is redacted, so the produced records do not identify which agencies ran the searches.
- Within the produced log, a majority of searches carry no specific, structured reason — over 58% are only “Other/Unspecified” or generic “investigation.” This is a documentation-completeness gap in the record, not a finding about any officer’s purpose.
- Activity is overwhelmingly human-initiated: interactive query types are 99.71% of the log; programmatic API access is 0.08%. The scale is human searches, not automated polling.
- The County’s own searches concentrate in drug enforcement — 37.4% coded Drugs/Narcotics, the single largest category.
- Monthly volume dropped sharply after July 2025 (from ~340,000–400,000 to ~28,000–81,000), a change the production does not explain.
- 470 AI natural-language searches let officers hunt vehicles by description alone; content moderation flagged almost nothing across 2.98 million records.
- No North Carolina court has construed Article 3D; whether the County’s standing, network-wide sharing satisfies § 20-183.32(e) is a question of first impression.
- The four sharing/receiving-agency lists cannot be answered from the redacted log and appear to remain outstanding.

Methodology: All figures were computed directly from the produced CSV files (one Organization Audit summary plus eighteen monthly search-log extracts, 2,980,082 records combined). Search-type and offense-category counts were tabulated programmatically; offense categories for the network log were grouped from inconsistent free text and are approximate. Percentages are of the total network-audit record count unless otherwise noted. This document reports what the records show and does not draw legal conclusions.