City of Syracuse - Surveillance Technology Audit

Surveillance Technology Working Group

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Executive Summary

Syracuse Mayor Ben Walsh's Surveillance Technology Executive Order ("Executive Order") effective December 1, 2020, outlined, among other responsibilities, a need for an initial audit which would identify technologies currently used or owned by the City of Syracuse ("City") as surveillance technologies or not. These technologies will be grandfathered into the system and will not go through the voting process. They will simply be analyzed and tracked for public dissemination.

This report presents the initial inventory of surveillance technologies currently used or owned by the City. The inventory has been prepared by the Surveillance Technology Working Group ("STWG") as established and directed by the Executive Order. The inventory of surveillance technologies is based on self-reporting by various City departments such as Digital Services, Syracuse Fire Department ("SFD"), Syracuse Police Department ("SPD"), etc. Once the technologies were identified, they were reviewed by the STWG over 41 meetings by applying Syracuse's definition of surveillance technology, which is defined as

> *"Technology whose primary purpose is to observe or analyze the movements, behavior, or actions of identifiable individuals in a manner that is reasonably likely to raise concerns about civil liberties, freedom of speech or association, racial equity or social justice. Identifiable individuals also include individuals whose identity can be revealed by license plate data when combined with any other record."*

The review process concludes with voting by group members to determine whether the particular technology will be characterized as surveillance technology or not.

What was found:
Seven technologies being used by the city that meet the definitions of a surveillance technology.

- Five are being utilized by the Syracuse Police Department
- One is being utilized by the Syracuse Fire Department
- One is being utilized by the Law Department.

This report will make the following recommendations discussed more extensively in the "Recommendations" section:
1. Consider the inventory of surveillance technology as preliminary.
2. Identify high-risk cases and applicable exemptions in inventory in a second-pass review.
3. Establish a tracking process.

Institutional Background

On December 1, 2020, Syracuse Mayor Ben Walsh signed an Executive Order directing all departments of the City of Syracuse to adopt a comprehensive Surveillance Technology Policy to "ensure transparency, equity, and public participation" around the procurement and use of surveillance technologies ("the policy").

The policy establishes the **Surveillance Technology Working Group (STWG)**. Pursuant to the policy, the STWG is at the center of a new governance process for surveillance technology in the City of Syracuse. The STWG is responsible for the "maintenance of a surveillance technology inventory and the evaluation of technologies". The responsibilities of the STWG includes specifically an "initial audit defining technologies currently used or owned by the City as surveillance or not" as stated in the Policy.

To **evaluate new technologies**, the STWG receives submissions from all city departments interested in the use of data collection technology to determine whether a proposed technology qualifies as a Surveillance Technology, solicit public comments, and make a recommendation to the mayor.

To maintain an **inventory of surveillance technologies**, the STWG has concluded an initial review of technology currently used by City departments (see Appendix 1 for more information on how method and steps taken to create this inventory). This memo reports on this initial inventory by describing the method of determinations, reporting on the results, and presenting next steps.

Specifically, the policy provides that the STWG has **three responsibilities or functions** with respect to the inventory of surveillance technology
   I.   **Upkeep and maintenance** of the technology audit list, including the technologies that were submitted to the STWG as well as existing technologies currently owned or in use by City departments that were defined as surveillance technologies as part of the inventory.
   II. **Tracking** of surveillance technology used or owned by City departments
   III. **Public dissemination** of the list of surveillance technologies used or owned by City departments

These three responsibilities inform the recommendations and next steps presented below (Section "Recommendations").

> "As we continue to build the City's capacity to collect and use data to deliver services more effectively and efficiently, this executive order will increase transparency. It ensures that people have the opportunity to know what technologies are being considered and have a say on them before they are procured and deployed," said Mayor Walsh. "It also

respects the important oversight role that the Common Council has in representing the interests of our constituents."

The Surveillance Technology Executive Order puts in place policies and procedures for oversight on how the city pays for such technology and ensures that surveillance tools are used in a safe and well-governed way.The Executive Order, Walsh's second as Mayor, authorizes the administration to immediately begin implementation of a six-page Surveillance Technology policy. The document was developed in the second half of 2020 under the guidance of the City's Office of Accountability Performance and Innovation with input from multiple department heads and city staff representatives.

Several departments, including the Syracuse Police Department, Water Department, Syracuse Fire Fire Department, Office of Analytics, Performance & Innovation (API), Neighborhood and Business Development (NBD), and Strategic Initiatives were involved in the development and implementation of the Surveillance Technology policy.

Definitions and Method

The Surveillance Technology Working Group defines "surveillance technology" according to the directive laid out in Mayor Walsh's Executive Order on Surveillance Technology issued on December 1, 2020, which can be found in Section 2 of this audit. The Executive Order considers surveillance technology to be:

> "Technology whose primary purpose is to observe or analyze the movements, behavior, or actions of identifiable individuals in a manner that is reasonably likely to raise concerns about civil liberties, freedom of speech or association, racial equity or social justice. Identifiable individuals also include individuals whose identity can be revealed by license plate data when combined with any other record."

The Executive Order also establishes exemptions for certain technologies that might otherwise meet the criteria set forth by this definition. The following technologies are exempted:

> a. Technology that is used to collect data where any individual knowingly and willingly provides the data.
> b. Technology that is used to collect data where individuals were presented with a clear and conspicuous opt-out notice.
> c. Technologies used for everyday, normal course of business office use.
> d. Body-worn cameras (refer to existing BWC policy).
> e. Cameras installed in or on a police vehicle (refer to existing policy).
> f. Cameras installed pursuant to state law authorization in or on any vehicle or

along a public right-of-way solely to record traffic violations (data collected would be used exclusively for traffic enforcement purposes).

g. Cameras installed on City property solely for security purposes.

h. Cameras installed solely to protect the physical integrity of City infrastructure, such as cameras at water reservoirs.

i. Technology that monitors only City employees in the performance of their City functions.

The Executive Order requires that all technologies for use by City departments that were in place before the issuance of the Executive Order be reviewed by the STWG to determine if they satisfy the definition of surveillance technology. City departments provided lists of all such technologies to the STWG for evaluation. All non-exempt technologies determined to be surveillance were inventoried and are included in the following section. See Appendix 1 for more information on the methodology used by the STWG to complete this audit and Appendix 2 for a list of all technologies reviewed by the STWG.

Inventory of Surveillance Technologies

Here is the list of technologies that the City of Syracuse uses that meet the city's definition of being a type of surveillance technology. Here the **seven** identified technologies are organized by department.

1. **Police Department**

Technology	Department	What information is obtained?	Purpose of the technology	Vendor (If obtained by STWG)	Public Policy
Body Cameras	Syracuse Police Department	Video footage of officers responding to calls for service.	Documenting police interactions with the community.	Axon	Yes[1]
Criminal Observation and Protection System (COPS) Street Cameras	Syracuse Police Department	Video footage of streets and intersections where pole mounted cameras are located.	Reviewing crimes, monitoring large scale events. Typically have a couple of Officer's watching the cameras for suspicious activity, camera operators will make sure camera's are pointed in the right direction.		
ShotSpotter	Syracuse Police Department	Audio recording of loud noises that sound like gunshots. The sounds are then triangulated between three receivers to identify the	Allow officers to be able to identify the location where they need to respond to for shots fired. Location is accurate within 25 feet.	ShotSpotter	

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[1] https://ourcity.syrgov.net/wp-content/uploads/2019/06/V1A3S83-Body-Worn-Camera-Policy_110118_current.pdf.

Technology	Department	What information is obtained?	Purpose of the technology	Vendor	Public Policy
		location the sound originated from.			
Temporary Cameras (Trail Cams)	Syracuse Police Department	Video footage from city or private property where crimes have been identified.	Portable cameras have been used to try to catch people in a specific crime, such as dumping trash on city or private property.		
Fotokite Tethered Drone	Syracuse Police Department	Video footage from active emergency scenes from the air.	The video feed from the air increases awareness for what is happening at the scene and provides footage from a different perspective during crisis response by the Syracuse Police.	Fotokite	

2. **Fire Department**

Technology	Department	What information is obtained?	Purpose of the technology	Vendor	Public Policy
Fire Department Drones	Syracuse Fire Department	Video and still camera images. The Fotokite drone provides thermal (heat) imaging also.	The video feeds are used in rescue scenarios to allow Fire Department staff to view the interior of a building if they cannot enter due to structural instability. Provides an aerial view of the fire	Mavic Air, Yuneec H520, Mavic 2 Enterprise, Autel EVOII, Fotokite Tethered, Syma Drone, and UA	

| | | | and the building. | Sidekick | |

3. Law Department

Technology	Department	What information is obtained?	Purpose of the technology	Vendor	Public Policy
Accurint - Person Searching	Law Department	Typically requests a Comprehensive Individual Report. This report will provide information regarding: Bankruptcies, Criminal Records, Property Ownership, Sexual Offenses, Possible Associates and Relatives (Spouses, Children, will show deceased people with the same last surname), neighbors, associates could be business associates. Common addresses shared will put someone in the associate category.	To assist City departments in sending out service to community members regarding judgements that have been made against them. Typically from Codes Enforcement or BAA when they have not been able to effectuate service. This can only be accessed by one City staff person. Every time that staff runs a report, they have to document why they are running it and which report they are running. 99.9% is to locate for service purposes. Will occasionally get a request from a City Hall attorney to locate a witness.	LexisNexis	

Recommendations

The executive order and its surveillance technology policy define the STWG's responsibility to audit existing technology currently used or owned by the City. The policy includes a provision regarding technologies that are determined to be surveillance technologies after an initial audit. Of technologies that are determined to be surveillance technologies in the audit performed by the STWG, the policy provides: "These technologies will be grandfathered into the system and not go through the voting process, will simply be tracked for public dissemination." Accordingly, this report summarizes which technologies are defined as surveillance technologies without any further evaluation or recommendation about any particular technology individually. This report contributes to an emerging situational awareness.

In light of the surveillance technology policy and the three functions of the surveillance technology inventory specified therein (Section "Institutional Background" above), to facilitate the maintenance and tracking of the inventory, as well as to prepare for a regular public dissemination, the following recommendations are offered.

Recommendation 1: Publicize inventory of surveillance technology in line with the Executive Order.
    a) The criteria of inclusion in the inventory was exclusively whether a given technology meets the definition of "surveillance technology" in light of the descriptions of the technology and the evidence presented to the group. The applicability of exceptions or bans—as specified in the Executive Order—were not considered. Potential risks and mitigation strategies were not discussed. Thus, the inclusion of a technology on the inventory of surveillance technologies does not indicate that the use of the technology is suspicious or problematic.

Recommendation 2: Establish a tracking process. One of the stated functions of the surveillance technology policy and the responsibilities of the STWG is (i) to maintain the technology audit inventory and (ii) to track surveillance technology that is used or owned by City departments. <u>Establishing a robust and cooperative tracking process for surveillance technologies is crucial to monitor and govern both *mission creep* and *function creep*</u> — both of which are well-known systemic risk factors in the use of surveillance technologies.[2]

- *Mission creep:* The purpose, rationale, or actual use of a given technology might change over time (including but not limited to: practices governing when the technology is used and for what purpose, change in the class of data subjects, how the data is stored, accessed, and shared). One example of mission creep is the government of Singapore's

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[2] Caines, Stephen, 'Watching the Watchtower: A Surveillance AI Analysis and Framework', in Justin B. Bullock and others (eds), The Oxford Handbook of AI Governance (online edn, Oxford Academic, 14 Feb. 2022), https://doi.org/10.1093/oxfordhb/9780197579329.013.47, accessed 21 Mar. 2023.

decision to use contact tracing information (collected for public health) in criminal investigations.

- *Function creep*: The functionality of a technology, its complexity or sophistication (including but not limited to technical capabilities, analytical insights that can be generated, as well as data access and retention) might change over time. One example of function creep is the addition of facial recognition capabilities to an existing CCTV infrastructure.

To fulfill these responsibilities, with the support of City departments, the STWG should establish a tracking process. In regular time intervals of every one or two years, the STWG should:

a) *Update the inventory.* Technologies that are no longer in use and not owned by the City should be removed. New technologies that might be identified as surveillance technologies should be added (if, for some reason, they have not undergone the submission process before procurement). [The classification of which technologies in the inventory count as high-risk technologies should be updated.]

b) *Audit [high risk] technologies for stability of mission and function.* If either mission or function have changed [report to Mayor's office (with or without recommendation) / disclose to the public].

Appendix 1: Surveillance Technology Audit Methodology

To complete this audit, the STWG went through a multi-step process over several months, starting in May 2021.

1. **Initial survey**: We sent a survey to the three departments that were presumed to be the most prominent users of technologies with surveillance capabilities (Syracuse Police Department, Department of Fire, and the Office of Strategic Initiatives), to get a detailed inventory of all applications that were already implemented.
2. **Review of software subscription inventory**: The Department of Information Technology (IT) keeps a running inventory of all software subscriptions that are captured in the City's technology budget. This list is not perfect, as sometimes City employees may subscribe to software offered with no upfront fees without notifying IT (a phenomenon referred to as 'Shadow IT'). The STWG went through this entire list composed of **106** entries (see Appendix 2) and assessed whether the software could have implications for citizens' privacy, or if we needed further information.

Appendix 2: All technologies reviewed

Technology	Department	Type of Technology	What is Software used for?	Vendor (If Obtained by STWG)
Radar	Syracuse Police Department	7 Car mounted radar devices for verifying suspected speeding vehicles. Continues data at how fast a vehicle is traveling.	To identify cars that are traveling above the speed limit and issue tickets.	
Chairs2 Database	Syracuse Police Department	Includes police report data entered by Officers. Database also includes 911 Center Call Data.	Record management system.	
TraCS	Syracuse Police Department	Accident reports. Stored in TraCS. State run system. Transferred between different drivers and vehicle owners.	Provide information to insurance companies.	
Blue Team	Syracuse Police Department	Complaints that have been filed against police officers by members of the public. This also tracks use of force both within policy and not within policy.	Record management system.	IAPRO
Road temperature sensing	Strategic Initiatives	Mounted on street poles, read road surface temperature levels.	For ice detection	
Street flooding detection	Strategic Initiatives	Optical sensor that measures the distance between the top of the catch basin and where the water is sitting.	Water level monitoring occuring at five locations where there are known issues related to catch basins.	
Creek level monitoring	Strategic Initiatives	Optical sensor at two different locations installed along Onondaga Creek.	Trying to catch conditions where the creek could flood.	
Vacant house smoke and temperature detection	Strategic Initiatives	Smoke detectors installed in different landbank houses to help detect fire and smoke.	Help avoid a fire starting in a house and destroying the structure.	

Vacant house motion sensors – notifications/alerts only		Motion sensors, not cameras. They just detect the presence of something enters the room that the sensor is installed.	To notify staff if a person or large animal has entered a vacant home.	
Weather/Air Quality (AQ) sensors		Four sensors deployed in the city.	To measure air temperature, dew point, relative humidity, CO, NO2, O3, PM10, PM2.5	
Trash can fullness sensors		Measures the distance from top of trash can to the contents if the trash can, which helps determine if it is full or not. Have around 8 or 9 in operation right now.	To help determine when these trash cans need to be emptied.	
Adobe Creative Cloud (GDWG) 10 licenses	Communications	Creative software.	Marketing, editing videos/pictures, website creation	
AMS	Water Dept.		Maintenance management software	
Asana (SHI)	Many Departments		Project/work management	
OnBase	Finance/Law		Documentation	
B2GNow	Budget/MWBE		Tracking contract compliance	
BAA--for the Record				
BAA--IBM management Suite				
Balancing Act				
BAS Animal control system hositing fee				
BAS Animal control system software maint				

BAS IPS annual software Support/Maint	Code Enforcement/ Permits/Law/ Tax/Budget/M WBE		Information Storage	
BAS Web Portal				
Bitly	Comms		Used to shorten URL links	
Chemira (Creekwalk phones)		Emergency Phones	Emergency phones provided on Creekwalk trail.	
Camino	Permits		Permitting/Licensing	Camino
OpenCounter	Permits		Permitting/Licensing Guide	OpenCount er
E-Plan Software	Permits/Code Enforcement		Planning review	E-Plan Software
Communicatio ns Software Media Monitoring and communicatio ns software				
Cyclance cyber security NAUGHTON				Naughton
Cyclomedia (Waiver of RFP)	Assessment		City mapping software	Cyclomedia
DOCUSIGN (Carahsoft)	Personnel		Form workflow management	Docusign
Dossier Software	DPW		Fleet management	Dossier
Fleet Management (Samsara)	DPW		Fleet management	Samsara
SeeClickFix (SHI)	Cityline		Request & work management	SeeClickFix
Finance Aims			Traffic Tickets. Parking checkers enter traffic information here.	AIMS

Finance Drop Box			File sharing tool.	Dropbox
For the Record FTR BAA				For the Record
Foxit licenses	Organization		PDF editor	Foxit
Google One				Google
Hamer (E-Tax)	Codes		Records of tax payments and tax delinquency. Minimal PII. Records of other available public information	Hamer
KnowBe4 ISECURE	IT		Security awareness training	KnowBe4
Kronos WFC			Workforce management software	Kronos
Kronos Telestaff	Organization		Time keeping	Kronos
LAW Municipal Code	Law/City Clerk		Ordinance documentation	Municode
Law Needles Trial Works	Law		Case management	Needles
WestLaw Publishing			WestLaw is a legal research service used the by the City's Law department for researching case law, statutes, court orders, trial transcripts and briefs, treatises, and similar legal information. Most, if not all, City attorneys have access to this database. (Provided from Muj Tirmizey)	Westlaw
MAAS360 Essential Services	IT		Cybersecurity monitoring	IBM
Meraki (Software to manage wifi)				Maraki
LCP Tracker	Budget		Payroll system for subcontractors	LCP Tracker

Navaint upgrade to OnBase full text search				Navaint
Naviant maintenance				Navaint
Microsoft 365	Organization		Communication/Collaboration/Organizational Documentation	Microsoft
ORACLE Hyperion maintenance				Oracle
ORACLE PeopleSoft maint	Finance		Financial analytics	Oracle
Canva Subscription Graphic Software	Parks & Recreation		Marketing/designing software	Canva
Fivrr Subscription	Parks & Recreation			Fivrr
Istock Photo Subscription	Parks & Recreation		Stock photography	Istock
JotForms Subscription	Parks & Recreation		Creating online forms	Jotforms
DAVY TREE Parks/Ground - Treekeeper Data	Parks & Recreation		Forestation management	DAVY
Peak email entitle	Parks & Recreation			Entitle
POWERDMS hosting	IT		Policy management software	POWERDMS
Rec/Desk Software Parks/Rec	Parks & Recreation		Recreation software	RecDesk
SurveyMonkey	Organization	Survey software.	Resident engagement	SurveyMonkey
SYSAID Software maint (help desk)	IT		Help desk software	SYSAID

Webex	Organization		Video Conferencing/Meetings	Cisco
ZOHO ManageEngine ADAudit			CRM	Zoho
Microsoft Azure	Digital Services		Cloud computing system (active directory, email, deployment)	Microsoft
ClickUp (Permits)	Permits		Project management software	ClickUp
Github	API		Version control	Github
Canva	Comms		Digital & physical marketing/brand building	Canva
MailChimp	Comms		Email marketing/enews letters/manage stakeholder contacts	MailChimp
Twilio	Comms		Text/mobile marketing (engagement software)	Twilio
Slack	Digital Services/Comms		Communication and file sharing	Slack
FOIL / FOIA Request Software	Law		Record request management	Just FOIA
PPA (Vaccine Tracking)	IT/Personnel		Covid 19 vaccination status tracking	Go-EVo
Confluence	API		Documentation	Confluence
LucidChart	Organization (limited)		Creating diagrams	Lucid Chart
MachineQ	API/Digital Services		IoT Deployment and data management software	MachineQ
OpenCities / OpenForms (Granicus)	Organization		CMS for main city website/Digital Forms	Open Cities
Xpress Pay	Law		Online payment system	Xpress Pay
InvoiceCloud	PVB/BAA/Water		Online payment solution	Invoice Cloud
ArcGIS Online	Water/Planning/Engineering/Comms		Mapping and analytics software	ESRI
Water: ArcGIS Online			Mapping and analytics software	ESRI

Water: CityWorks	Water/DPW/ Parks		Maintenance management software	City Works
Neptune	Water	Water Meter Reader Software	Monitoring water meters	Neptune