City of Seattle

2023 Surveillance Impact Report

Callyo

Seattle Police Department

City of Seattle

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Surveillance Impact Report ("SIR") overview

About the Surveillance Ordinance

The Seattle City Council passed Ordinance 125376, also referred to as the "Surveillance Ordinance," on September 1, 2017. SMC 14.18.020.b.1 charges the City's executive with developing a process to identify surveillance technologies subject to the ordinance. Seattle IT, on behalf of the executive, developed and implemented a process through which a privacy and surveillance review is completed prior to the acquisition of new technologies. This requirement, and the criteria used in the review process, are documented in Seattle IT Policy PR-02, the "Surveillance Policy".

How this Document is Completed

This document is completed by the requesting department staff, support and coordinated by the Seattle Information Technology Department ("Seattle IT"). As Seattle IT and department staff complete the document, they should keep the following in mind.

1. Responses to questions should be in the text or check boxes only; all other information (questions, descriptions, etc.) Should **not** be edited by the department staff completing this document.
2. All content in this report will be available externally to the public. With this in mind, avoid using acronyms, slang, or other terms which may not be well-known to external audiences. Additionally, responses should be written using principally non-technical language to ensure they are accessible to audiences unfamiliar with the topic.

Surveillance Ordinance Review Process

The following is a high-level outline of the complete SIR review process.

Upcoming for Review	Initial Draft	Open Comment Period	Final Draft	Working Group	Council Review
The technology is upcoming for review, but the department has not begun drafting the surveillance impact report (SIR).	Work on the initial draft of the SIR is currently underway.	The initial draft of the SIR and supporting materials have been released for public review and comment. During this time, one or more public meetings will take place to solicit feedback.	During this stage the SIR, including collection of all public comments related to the specific technology, is being compiled and finalized.	The surveillance advisory working group will review each SIR's final draft and complete a civil liberties and privacy assessment, which will then be included with the SIR and submitted to Council.	City Council will decide on the use of the surveillance technology, by full Council vote.

Privacy Impact Assessment

Purpose

A Privacy Impact Assessment ("PIA") is a method for collecting and documenting detailed information collected in order to conduct an in-depth privacy review of a program or project. A PIA asks questions about the collection, use, sharing, security and access controls for data that is gathered using a technology or program. It also requests information about policies, training and documentation that govern use of the technology. The PIA responses are used to determine privacy risks associated with a project and mitigations that may reduce some or all of those risks. In the interests of transparency about data collection and management, the City of Seattle has committed to publishing all PIAs on an outward facing website for public access.

When is a Privacy Impact Assessment Required?

A PIA may be required in two circumstances.

1. When a project, technology, or other review has been flagged as having a high privacy risk.
2. When a technology is required to complete the surveillance impact report process. This is one deliverable that comprises the report.

1.0 Abstract

1.1 Please provide a brief description (one paragraph) of the purpose and proposed use of the project/technology.

Motorola Solutions' Callyo, a software as a service (SaaS), is a cell phone identification masking and recording technology. The technology masks the phone number assigned to an existing phone, displaying a different local number to recipients of calls from the phone. Additionally, the technology can record all calls made to/from the masked phone, covertly record audio, as well as GPS locate the phone of a caller. When Seattle Police Department (SPD) utilizes Callyo to records conversations, the technology is used only with search warrant. Callyo is a subset of the SPD audio recording systems explained in the SIR titled "Audio Recording Systems 'Wires'."

1.2 Explain the reason the project/technology is being created or updated and why the PIA is required.

Callyo has the ability to disguise the identity of a willing participant by masking a phone number, record phone conversations, covert recording device, and GPS locate identifiable individuals, who are unaware of the operation. Without appropriate safeguards, this raises significant privacy concerns. Recognizing this potential, SPD utilizes Callyo in a limited fashion, and only subject to court order.

2.0 Project / Technology Overview

Provide an overview of the project or technology. The overview gives the context and background necessary to understand the purpose, mission and justification for the project / technology proposed.

2.1 Describe the benefits of the project/technology.

Callyo allows SPD to pursue resolution of criminal investigations expeditiously, by masking the identify of an officer in an undercover investigation, recording conversations and location of suspects, only after a court magistrate has determined that sufficient probable cause exists and an order has issued. Without this technology, SPD would be unable to collect important evidence in some criminal investigations.

2.2 Provide any data or research demonstrating anticipated benefits.

The primary benefit of audio recording systems is in the gathering of evidence used in the resolution of criminal investigations. Audio recording technologies have been utilized by law enforcement in the United States since the 1920s. "The value of employing electronic surveillance in the investigation of some forms of serious crime, in particular organized crime, is unquestionable. It allows the gathering of information unattainable through other means."[1]

[1] https://www.unodc.org/documents/organized-crime/Law-Enforcement/Electronic_surveillance.pdf

2.3 Describe the technology involved.

Callyo is installed on a SPD Department cell phone and has the ability to disguise the identity of an officer by masking a phone number, record phone conversations, and GPS locate identifiable individuals, who are unaware of the operation. When Seattle Police Department (SPD) utilizes Callyo to records conversations, the technology is used only with a search warrant.

2.4 Describe how the project or use of technology relates to the department's mission.

The mission of the Seattle Police Department is to prevent crime, enforce the law, and support quality public safety by delivering respectful, professional, and dependable police services. SPD's department priorities include the use of best practices that include officer safety guidelines and performance-based accountability to provide progressive and responsive police services to crime victims, witnesses, and all members of the community, and to structure the organization to support the SPD mission and field a well-trained sworn and non-sworn workforce that uses technology, training, equipment, and research strategically and effectively. Audio recording systems and phone number masking contribute to crime reduction by assisting in collecting evidence related to serious and/or violent criminal activity as part of the investigation of criminal activity. These technologies are used to record audio with a warrant.

2.5 Who will be involved with the deployment and use of the project / technology?

Callyo is utilized in two different ways by units within SPD: Technical and Electronic Support Unit (TESU) and the High Risk Victims Unit (HRVU). The High Risk Victims Unit uses Callyo to mask phone numbers but does not utilize the recording features of Callyo.

For all other Callyo deployments, once an Officer/Detective has obtained a court order to utilize Callyo, having established probable cause, s/he makes a verbal request to the TESU for deployment of Callyo. TESU documents the equipment requested, the legal authority, and the case number. TESU then deploys the equipment to the requesting Officer/Detective to engage within the scope of the court order.

If no data was collected by the device that assists in the pursuit of the criminal investigation or falls within the scope of the court order, the device is purged in its entirety and no data is provided to the Officer/Detective for the investigation file.

3.0 Use Governance

Provide an outline of any rules that will govern the use of the project / technology. Please note: non-City entities contracting with the City are bound by restrictions specified in the surveillance ordinance and privacy principles and must provide written procedures for how the entity will comply with any restrictions identified.

3.1 Describe the processes that are required prior to each use, or access to/ of the project / technology, such as a notification, or check-in, check-out of equipment.

Callyo is managed and maintained by staff within the Technical and Electronic Support Unit (TESU) and the High Risk Victims Unit.

Staff within the High Risk Victims Unit deploy Callyo for investigations related to cases assigned to that unit and maintain records of each Callyo deployment. The High Risk Victims Unit uses Callyo to mask phone numbers but does not utilize the recording features of Callyo.

For all other Callyo deployments, once an Officer/Detective has obtained a court order to utilize Callyo, having established probable cause, s/he makes a verbal request to the TESU. TESU staff completes TESU's Request Form that requires a reason for the request, a case number associated with the investigation, and a copy of the court order. Each request is screened by the TESU Supervisor prior to deployment.

TESU detectives then installs Callyo on a SPD cellphone and uses Callyo to connect into a willing participant's phone conversation with a 3rd party.

Each deployment is logged, and all request forms (including court order) are maintained within TESU.

3.2 List the legal standards or conditions, if any, that must be met before the project / technology is used.

The recording features of Callyo are utilized only after legal standards of the court-issued warrant have been met, as required by the Washington Privacy Act, Chapt. 9.73 RCW.

3.3 Describe the policies and training required of all personnel operating the project / technology, and who has access to ensure compliance with use and management policies.

Supervisors and commanding officers are responsible for ensuring compliance with policies.

Callyo may only be issued/deployed by TESU and High Risk Victims Unit detectives. All TESU and High Risk Victims Unit staff that deploy Callyo are trained in its use. Staff within the High Risk Victims Unit deploy Callyo for investigations related to cases assigned to that unit and maintain records of each Callyo deployment. The High Risk Victims Unit uses Callyo to mask phone numbers but does not utilize the recording features of Callyo.

For all other Callyo deployments, once an Officer/Detective has obtained a court order, having established probable cause, to utilize Callyo, s/he makes a verbal request to the TESU. TESU staff completes TESU's Request Form that requires a reason for the request, a case number associated with the investigation, and a copy of the court order. TESU staff then train requesting Officers/Detectives in their use when they deploy the equipment.

The TESU Supervisor screens all deployments, and ensures that all staff receive adequate training, specific to the technologies.

All SPD employees must adhere to laws, City policy, and Department Policy (SPD Policy 5.001), and any employees suspected of being in violation of laws or policy or other misconduct are subject to discipline, as outlined in SPD Policy 5.002.

4.0 Data Collection and Use

4.1 Provide details about what information is being collected from sources other than an individual, including other IT systems, systems of record, commercial data aggregators, publicly available data and/or other City departments.

Audio recording in Callyo collects conversations, sounds, and location information of individuals related to a criminal investigation. The information is extracted onto a thumb drive from Callyo and stored utilizing SPD policies regarding evidence. SPD Policy 7.010 governs the submission of evidence and requires that all collected evidence be documented in a General Offense Report. Evidence is submitted to the Evidence Unit and associated with a specific GO Number and investigation.

4.2 What measures are in place to minimize inadvertent or improper collection of data?

Deployment of audio recording devices, including Callyo, is constrained to the conditions stipulated by court order, which provides the legal authority and the scope of collection. All deployments of audio recording devices are documented by TESU and subject to audit by the Office of Inspector General and the federal monitor at any time.

As outlined in 2.5 above, if no data is collected by the device that assists in the pursuit of the criminal investigation or falls within the scope of the court order warrant (as determined by the judge), the device is purged in its entirety and no data is provided to the requesting Officer/Detective for the investigation file.

4.3 How and when will the project / technology be deployed or used? By whom? Who will determine when the project / technology is deployed and used?

Callyo is managed and maintained by staff within the Technical and Electronic Support Unit (TESU) and the High Risk Victims Unit.

Staff within the High Risk Victims Unit deploy Callyo for investigations related to cases assigned to that unit and maintain records of each Callyo deployment. The High Risk Victims Unit uses Callyo to mask phone numbers but does not utilize the recording features of Callyo.

For all other Callyo deployments, once an Officer/Detective has obtained a court order to utilize Callyo, having established probable cause, s/he makes a verbal request to the TESU. TESU staff completes TESU's Request Form that requires a reason for the request, a case number associated with the investigation, and a copy of the court order. Each request is screened by the TESU Supervisor prior to deployment.

Each deployment is logged, and all request forms (including warrant number) are maintained within TESU.

4.4 How often will the technology be in operation?

The High Risk Victims Unit uses Callyo to mask phone numbers but does not utilize the recording features of Callyo. Each deployment of this technology is logged within the HRVU.

Court ordered warrants determine the scope of each deployment where audio recording is attempted utilizing Callyo. Callyo is generally used to meet the needs of a criminal investigation, and the scope is specifically limited to the stipulations of the court-ordered warrants providing authorization of use.

4.5 What is the permanence of the installation? Is it installed permanently, or temporarily?

Once a warrant has been issued, TESU detectives uses Callyo to connect into a willing participant's phone conversation with a 3rd party. Callyo connections must be accepted by a participant. After a warrant has expired SPD does not initiate this connection.

4.6 Is a physical object collecting data or images visible to the public? What are the markings to indicate that it is in use? What signage is used to determine department ownership and contact information?

Callyo is not a physical object and there are no visible markings indicating when it is in use.

4.7 How will data that is collected be accessed and by whom?

Data collected with Callyo is entered into investigative files is securely input and used on SPD's password-protected network with access limited to authorized detectives and identified supervisory personnel.

All SPD employees are backgrounded and access is controlled by SPD Manual Title 12 provisions governing Department Information Systems including:

- SPD Policy 12.040 - Department-Owned Computers, Devices & Software,
- SPD Policy 12.050 - Criminal Justice Information Systems,
- SPD Policy 12.080 – Department Records Access, Inspection & Dissemination,
- SPD Policy 12.110 – Use of Department E-mail & Internet Systems, and
- SPD Policy 12.111 – Use of Cloud Storage Services.

4.8 If operated or used by another entity on behalf of the City, provide details about access, and applicable protocols.

SPD's audio recording devices, including Callyo, are not operated or used by other agencies.

4.9 What are acceptable reasons for access to the equipment and/or data collected?

On probable cause, the court can issue order authorizing interception, transmission, and recording of private communications or conversations when one party to the conversation or communication has consented. Detailed requirements spelled out in RCW 9.73.090(2), (4), and (5), and RCW 9.73.120, .130, and .140

Officers/Detectives must establish probable cause, as well as a showing of necessity, and obtain court-ordered warrant to utilize Callyo's recording features. The data is accessed in the course of a criminal investigation.

4.10 What safeguards are in place, for protecting data from unauthorized access (encryption, access control mechanisms, etc.) And to provide an audit trail (viewer logging, modification logging, etc.)?

Data collected utilizing Callyo is stored as evidence. SPD Policy 7.010 governs the submission of evidence and requires that all collected evidence be documented in a General Offense Report. Evidence is submitted to the Evidence Unit and associated with a specific GO Number and investigation.

TESU maintains logs of requests (including copies of request forms and warrants) and extractions that are available for audit. SPD's Audit, Policy and Research Section (APRS) can conduct an audit of the any system at any time. The Office of Inspector General and the federal monitor can also access all data and audit for compliance at any time.

5.0 Data Storage, Retention and Deletion

5.1 How will data be securely stored?

Data collected utilizing Callyo is stored as evidence on physical media such as a thumb drive. SPD Policy 7.010 governs the submission of evidence and requires that all collected evidence be documented in a General Offense Report. Evidence is submitted to the Evidence Unit and associated with a specific GO Number and investigation.

5.2 How will the owner allow for departmental and other entities, to audit for compliance with legal deletion requirements?

Per the Washington Secretary of State's Law Enforcement Records Retention Schedule, investigational conversation recordings are retained "for 1 year after transcribed verbatim and verified OR until disposition of pertinent case file, whichever is sooner, then Destroy" (LE06-01-04 Rev. 1).

TESU maintains a log of requests (including copies of warrants), extractions, and deployments that are available to any auditor, including the Officer of Inspector General and federal monitor.

5.3 What measures will be used to destroy improperly collected data?

The scope of audio recording authorization is outlined in court-ordered warrants. Any data that is collected outside the established scope is purged by the investigating detective.

SPD Policy 7.010 governs the submission of evidence and requires that all collected evidence be documented in a General Offense Report. Evidence is submitted to the Evidence Unit and associated with a specific GO Number and investigation.

All information must be gathered and recorded in a manner that is consistent with SPD Policy 6.060, such that it does not reasonably infringe upon "individual rights, liberties, and freedoms guaranteed by the Constitution of the United States and the State of Washington, including freedom of speech, press, association, and assembly; liberty of conscience the exercise of religion; the right to petition government for redress of grievances; and the right to privacy."

All SPD employees must adhere to laws, City policy, and Department Policy (SPD Policy 5.001), and any employees suspected of being in violation of laws or policy or other misconduct are subject to discipline, as outlined in SPD Policy 5.002.

5.4 which specific departmental unit or individual is responsible for ensuring compliance with data retention requirements?

Unit supervisors are responsible for ensuring compliance with data retention requirements within SPD.

SPD's Intelligence and Analysis Section reviews the audit logs and ensures compliance with all regulations and requirements.

Audit, Policy & Research Section personnel can also conduct audits of all data collection software and systems. Additionally, any appropriate auditor, including the Office of Inspector General and the federal monitor can audit for compliance at any time.

6.0 Data Sharing and Accuracy

6.1 Which entity or entities inside and external to the City will be data sharing partners?

SPD has no data sharing partners for audio recording devices, including Callyo. No person, outside of SPD, has direct access to Callyo or the data while it resides in the device.

Data obtained from the system may be shared outside SPD with the other agencies, entities, or individuals within legal guidelines or as required by law.

Data may be shared with outside entities in connection with criminal prosecutions:

- Seattle City Attorney's Office
- King County Prosecuting Attorney's Office
- King County Department of Public Defense
- Private Defense Attorneys
- Seattle Municipal Court
- King County Superior Court
- Similar entities where prosecution is in Federal or other State jurisdictions

Data may be made available to requesters pursuant to the Washington Public Records Act, Chapter 42.56 RCW ("PRA"). SPD will apply applicable exemptions to the data before disclosing to a requester. Individuals have the right to inspect criminal history record information maintained by the department (RCW 10.97.030, SPD Policy 12.050). Individuals can access their own information by submitting a public disclosure request.

Per SPD Policy 12.080, the Crime Records Unit is responsible for receiving, recording, and responding to requests "for General Offense Reports from other City departments and from other law enforcement agencies, as well as from insurance companies."

Discrete pieces of data collected by audio recording devices may be shared with other law enforcement agencies in wanted bulletins, and in connection with law enforcement investigations jointly conducted with those agencies, or in response to requests from law enforcement agencies investigating criminal activity as governed by SPD Policy 12.050 and 12.110. All requests for data from Federal Immigration and Customs Enforcement (ICE) authorities are referred to the Mayor's Office Legal Counsel in accordance with the Mayoral Directive, dated February 6, 2018.

SPD shares data with authorized researchers pursuant to properly executed research and confidentiality agreements as provide by SPD Policy 12.055. This sharing may include discrete pieces of data related to specific investigative files collected by the devices.

6.2 Why is data sharing necessary?

Data sharing is necessary for SPD to fulfill its mission of contributing to crime reduction by assisting in collecting evidence related to serious and/or violent criminal activity as part of investigation, and to comply with legal requirements.

6.3 Are there any restrictions on non-City data use?

Yes ☒ No ☐

6.3.1 If you answered yes, provide a copy of the department's procedures and policies for ensuring compliance with these restrictions.

Law enforcement agencies receiving criminal history information are subject to the requirements of 28 CFR Part 20, regulating criminal justice information systems In addition, Washington State law enforcement agencies are subject to the provisions of WAC 446-20-260 (auditing and dissemination of criminal history record information systems), and RCW Chapter 10.97 (Washington State Criminal Records Privacy Act).

Once disclosed in response to PRA request, there are no restrictions on non-City data use; however, applicable exemptions will be applied prior to disclosure to any requestor who is not authorized to receive exempt content.

6.4 How does the project/technology review and approve information sharing agreements, memorandums of understanding, new uses of the information, new access to the system by organizations within City of Seattle and outside agencies?

Research agreements must meet the standards reflected in SPD Policy 12.055. Law enforcement agencies receiving criminal history information are subject to the requirements of 28 CFR Part 20. In addition, Washington State law enforcement agencies are subject to the provisions of WAC 446-20-260, and RCW Chapter 10.97.

Following Council approval of the SIR, SPD must seek Council approval for any material change to the purpose or manner in which the audio recording devices may be used.

6.5 Explain how the project/technology checks the accuracy of the information collected. If accuracy is not checked, please explain why.

Callyo capture sounds as they are happening in the moment and the location information of individuals. The software does not interpret or otherwise, analyze any data it collects.

6.6 Describe any procedures that allow individuals to access their information and correct inaccurate or erroneous information.

Individuals may request records pursuant to the PRA, and individuals have the right to inspect criminal history record information maintained by the department (RCW 10.97.030, SPD Policy 12.050). Individuals can access their own information by submitting a public disclosure request.

7.0 Legal Obligations, Risks and Compliance

7.1 What specific legal authorities and/or agreements permit and define the collection of information by the project/technology?

SPD's use of Callyo is governed at the state level by the Washington Privacy Act. Callyo is utilized only with a court-ordered warrant.

7.2 Describe what privacy training is provided to users either generally or specifically relevant to the project/technology.

SPD Policy 12.050 mandates that all employees, including TESU personnel, receive Security Awareness Training (Level 2), and all employees also receive City Privacy Training.

7.3 Given the specific data elements collected, describe the privacy risks identified and for each risk, explain how it was mitigated. Specific risks may be inherent in the sources or methods of collection, or the quality or quantity of information included.

Privacy risks revolve around improper collection of sounds and conversations between members of the general public. As it relates to covert audio recording, SPD mitigates this risk by deploying them consistent to the stipulations outlined in the Washington Privacy Act, Chapt. 9.73 RCW, and only with authorization of a court-ordered warrant.

SMC 14.12 and SPD Policy 6.060 direct all SPD personnel to "any documentation of information concerning a person's sexual preferences or practices, or their political or religious activities must be for a relevant reason and serve a legitimate law enforcement purpose."

Additionally, SPD Policy 5.140 forbids bias-based policing and outlines processes for reporting and documenting any suspected bias-based behavior, as well as accountability measures.

Finally, see 5.3 for a detailed discussion about procedures related to noncompliance.

7.4 Is there any aspect of the project/technology that might cause concern by giving the appearance to the public of privacy intrusion or misuse of personal information?

The privacy risks outlined in 7.3 above are mitigated by legal requirements and auditing processes (i.e., maintenance of all requests, copies of warrants) that allow for any auditor, including the Office of Inspector General and the federal monitor, to inspect use and deployment and use of Callyo. The potential of privacy risk is mitigated by the requirement of a court ordered warrant before the technology is utilized.

8.0 Monitoring and Enforcement

8.1 Describe how the project/technology maintains a record of any disclosures outside of the department.

TESU itself does not disclose information collected by audio recording devices. This information is provided to the requesting Officer/Detective to be included in the requisite investigation file. TESU then purges all data collected. TESU maintains a log of all requests, deployments, and access.

Per SPD Policy 12.080, the Crime Records Unit is responsible to receive and record all requests "for General Offense Reports from other City departments and from other law enforcement agencies, as well as from insurance companies."

Any requests for public disclosure are logged by SPD's Public Disclosure Unit. Any action taken, and data released subsequently, is then tracked through the request log. Responses to Public Disclosure Requests, including responsive records provided to a requestor, are retained by SPD for two years after the request is completed.

8.2 What auditing measures are in place to safeguard the information, and policies that pertain to them, as well as who has access to the audit data? Explain whether the project/technology conducts self-audits, third party audits or reviews.

Requests to utilize audio recording devices, as well as logs of deployments, are kept within TESU and are subject to audit by the TESU Supervisor, Office of the Inspector General, and the federal monitor at any time.

Audit data is available to the public via Public Records Request.

Financial Information

Purpose

This section provides a description of the fiscal impact of the surveillance technology, as required by the surveillance ordinance.

1.0 Fiscal Impact

Provide a description of the fiscal impact of the project/technology by answering the questions below.

1.1 Current or potential sources of funding: initial acquisition costs.

Current ☐ potential ☐

Date of initial acquisition	Date of go live	Direct initial acquisition cost	Professional services for acquisition	Other acquisition costs	Initial acquisition funding source

Notes:

The initial acquisition costs for Callyo occurred prior to 2012.

1.2 Current or potential sources of funding: on-going operating costs, including maintenance, licensing, personnel, legal/compliance use auditing, data retention and security costs.

Current ☒ potential ☐

Annual maintenance and licensing	Legal/compliance, audit, data retention and other security costs	Department overhead	IT overhead	Annual funding source
Annual Licensing Basic System and Additional Callyo Lines of Service $7650				

Notes:

$4200/yr High Risk Victims Unit, $3450 TESU

1.3 Cost savings potential through use of the technology

Callyo recording is used with a search warrant to resolve investigations. It provides invaluable evidence that could not be calculated in work hours.

1.4 Current or potential sources of funding including subsidies or free products offered by vendors or governmental entities

N/A

Expertise and References

Purpose

The following information is provided to ensure that Council has a group of experts to reference while reviewing the completed surveillance impact report ("SIR"). Any individuals or agencies referenced must be made aware ahead of publication that their information has been included. All materials must be available for Council to access or review, without requiring additional purchase or contract.

1.0 Other Government References

Please list any other government bodies that have implemented this technology and can speak to the implementation of this technology.

Agency, municipality, etc.	Primary contact	Description of current use
United Nations Office on Drugs and Crime	Karen Kramer, Senior Expert karen.kramer@unodc.org	Virtually all law enforcement agencies throughout the world rely on audio recording devices in the routine course of criminal investigations.

2.0 Academics, Consultants, and Other Experts

Please list any experts in the technology under consideration, or in the technical completion of the service or function the technology is responsible for.

Agency, municipality, etc.	Primary contact	Description of current use

3.0 White Papers or Other Documents

Please list any authoritive publication, report or guide that is relevant to the use of this technology or this type of technology.

Title	Publication	Link
Current Practices in Electronic Surveillance	United Nations Office on Drugs and Crime	https://www.unodc.org/documents/organized-crime/Law-Enforcement/Electronic_surveillance.pdf

Racial Equity Toolkit ("RET") and engagement for public comment worksheet

Purpose

Departments submitting a SIR are required to complete an adapted version of the Racial Equity Toolkit ("RET") in order to:

- Provide a framework for the mindful completion of the SIR in a way that is sensitive to the historic exclusion of vulnerable and historically underrepresented communities. Particularly, to inform the public engagement efforts departments will complete as part of the surveillance impact report.
- Highlight and mitigate any impacts on racial equity from the adoption and the use of the technology.
- Highlight and mitigate any disparate impacts on individuals or vulnerable communities.
- Fulfill the public engagement requirements of the surveillance impact report.

Adaptation of the RET for Surveillance Impact Reports

The RET was adapted for the specific use by the Seattle Information Technology Departments' ("Seattle IT") Privacy Team, the Office of Civil Rights ("OCR"), and Change Team members from Seattle IT, Seattle City Light, Seattle Fire Department, Seattle Police Department, and Seattle Department of Transportation.

Racial Equity Toolkit Overview

The vision of the Seattle Race and Social Justice Initiative ("RSJI") is to eliminate racial inequity in the community. To do this requires ending individual racism, institutional racism and structural racism. The RET lays out a process and a set of questions to guide the development, implementation and evaluation of policies, initiatives, programs, and budget issues to address the impacts on racial equity.

1.0 Set Outcomes

1.1. Seattle City Council has defined the following inclusion criteria in the surveillance ordinance, and they serve as important touchstones for the risks departments are being asked to resolve and/or mitigate. Which of the following inclusion criteria apply to this technology?

☐ The technology disparately impacts disadvantaged groups.
☐ There is a high likelihood that personally identifiable information will be shared with non-City entities that will use the data for a purpose other than providing the City with a contractually agreed-upon service.
☒ The technology collects data that is personally identifiable even if obscured, de-identified, or anonymized after collection.
☒ The technology raises reasonable concerns about impacts to civil liberty, freedom of speech or association, racial equity, or social justice.

1.2 What are the potential impacts on civil liberties through the implementation of this technology? How is the department mitigating these risks?

Some personally identifiable information (PII) gathered during criminal investigations could be used to identify individuals who are associates of criminal suspects, such as their name, home address or contact information. Victims of criminal activity may also be identified during incident responses, whose identities should be protected in accordance with RCW 42.56.240 and RCW 70.02. SPD mitigates these risks by retaining as evidence only recordings within the framework established by the warrant obtained for each use of the technology.

1.3 What are the risks for racial or ethnicity-based bias through each use or deployment of this technology? How is the department mitigating these risks?

Include a description of any issues that may arise such as algorithmic bias or the possibility for ethnic bias to emerge in people and/or system decision-making.

The mission of the Seattle Police Department is to prevent crime, enforce the law, and support quality public safety by delivering respectful, professional, and dependable police services. To mitigate the risks for racial or ethnicity-based bias in the use of these audio recording systems, these devices are utilized only with a court-ordered warrant, having established probable cause.

1.4 Where in the City is the technology used or deployed?

☒ all Seattle neighborhoods

- ☐ Ballard
- ☐ Belltown
- ☐ Beacon Hill
- ☐ Capitol Hill
- ☐ Central District
- ☐ Columbia City
- ☐ Delridge
- ☐ First Hill
- ☐ Georgetown
- ☐ Greenwood / Phinney
- ☐ International District
- ☐ Interbay
- ☐ North
- ☐ Northeast
- ☐ Northwest
- ☐ Madison Park / Madison Valley
- ☐ Magnolia
- ☐ Rainier Beach
- ☐ Ravenna / Laurelhurst
- ☐ South Lake Union / Eastlake
- ☐ Southeast
- ☐ Southwest
- ☐ South Park
- ☐ Wallingford / Fremont
- ☐ West Seattle
- ☐ King county (outside Seattle)
- ☐ Outside King County.

If possible, please include any maps or visualizations of historical deployments / use.

If possible, please include any maps or visualizations of historical deployments / use here.

1.4.1 What are the racial demographics of those living in this area or impacted by these issues?

City of Seattle demographics: White - 69.5%; Black or African American - 7.9%; Amer. Indian & Alaska Native - 0.8%; Asian - 13.8%; Native Hawaiian & Pacific Islander - 0.4; Other race - 2.4%; Two or more races - 5.1%; Hispanic or Latino ethnicity (of any race): 6.6%; Persons of color: 33.7%.

King County demographics: White – 70.1%; Black or African American – 6.7%; American Indian & Alaskan Native – 1.1%; Asian, Native Hawaiian, Pacific Islander – 17.2%; Hispanic or Latino (of any race) – 9.4%

1.4.2 How does the Department to ensure diverse neighborhoods, communities, or individuals are not specifically targeted through the use or deployment of this technology?

Callyo is used exclusively during the investigation of crimes and only records information within the bounds of a court-ordered warrant, having established probable cause. There is no distinction in the levels of service SPD provides to the various and diverse neighborhoods, communities, or individuals within the city.

All use of Callyo must also comply with SPD Policy 12.050 – Criminal Justice Information Systems and may only be used for legitimate criminal investigative purposes.

1.5 How do decisions around data sharing have the potential for disparate impact on historically targeted communities? What is the department doing to mitigate those risks?

The Aspen Institute on Community Change defines *structural racism* as "…public policies, institutional practices, cultural representations and other norms [which] work in various, often reinforcing ways to perpetuate racial group inequity."[1] Data sharing has the potential to be a contributing factor to structural racism and thus creating a disparate impact on historically targeted communities. Data sharing is frequently necessary during the course of a criminal investigation to follow up on leads and gather information on suspects from outside law enforcement agencies. Cooperation between law enforcement agencies is an essential part of the investigative process.

In an effort to mitigate the possibility of disparate impact on historically targeted communities, SPD has established policies regarding the dissemination of data in connection with criminal prosecutions, Washington Public Records Act (Chapter 42.56 RCW), and other authorized researchers.

Further, SPD Policy 5.140 forbids bias-based policing and outlines processes for reporting and documenting any suspected bias-based behavior, as well as accountability measures.

1.6 How do decisions around data storage and retention have the potential for disparate impact on historically targeted communities? What is the department doing to mitigate those risks?

Like decisions around data sharing, data storage and retention have similar potential for disparate impact on historically targeted communities. The information obtained by Callyo is related only to criminal investigations and its users are subject to SPD's existing policies prohibiting bias-based policing. Further, SPD Policy 5.140 forbids bias-based policing and outlines processes for reporting and documenting any suspected bias-based behavior, as well as accountability measures.

1.7 What are potential unintended consequences (both negative and positive potential impact)? What proactive steps can you can / have you taken to ensure these consequences do not occur.

The most important unintended possible consequence related to the continued utilization of the Callyo is the possibility that the civil rights of individuals may be compromised by unlawful surveillance. SPD mitigates this risk by requiring a court-ordered warrant, having established probable cause, prior to the utilization of any recording capabilities of these technologies.

2.0 Public Outreach

2.1 Scheduled public meeting(s).

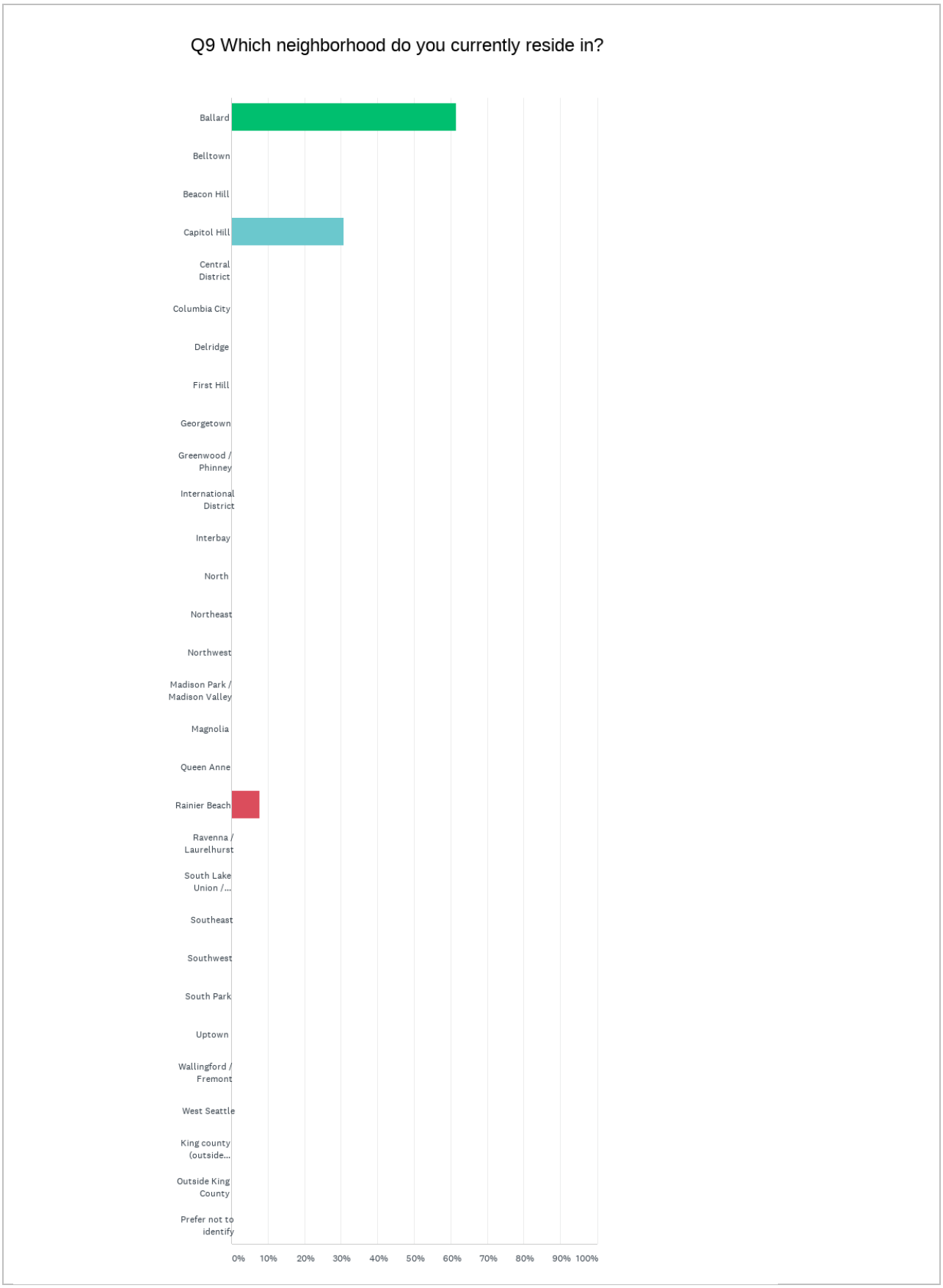
Location	Virtual Event
Time	Thursday, June 10th, 12 PM

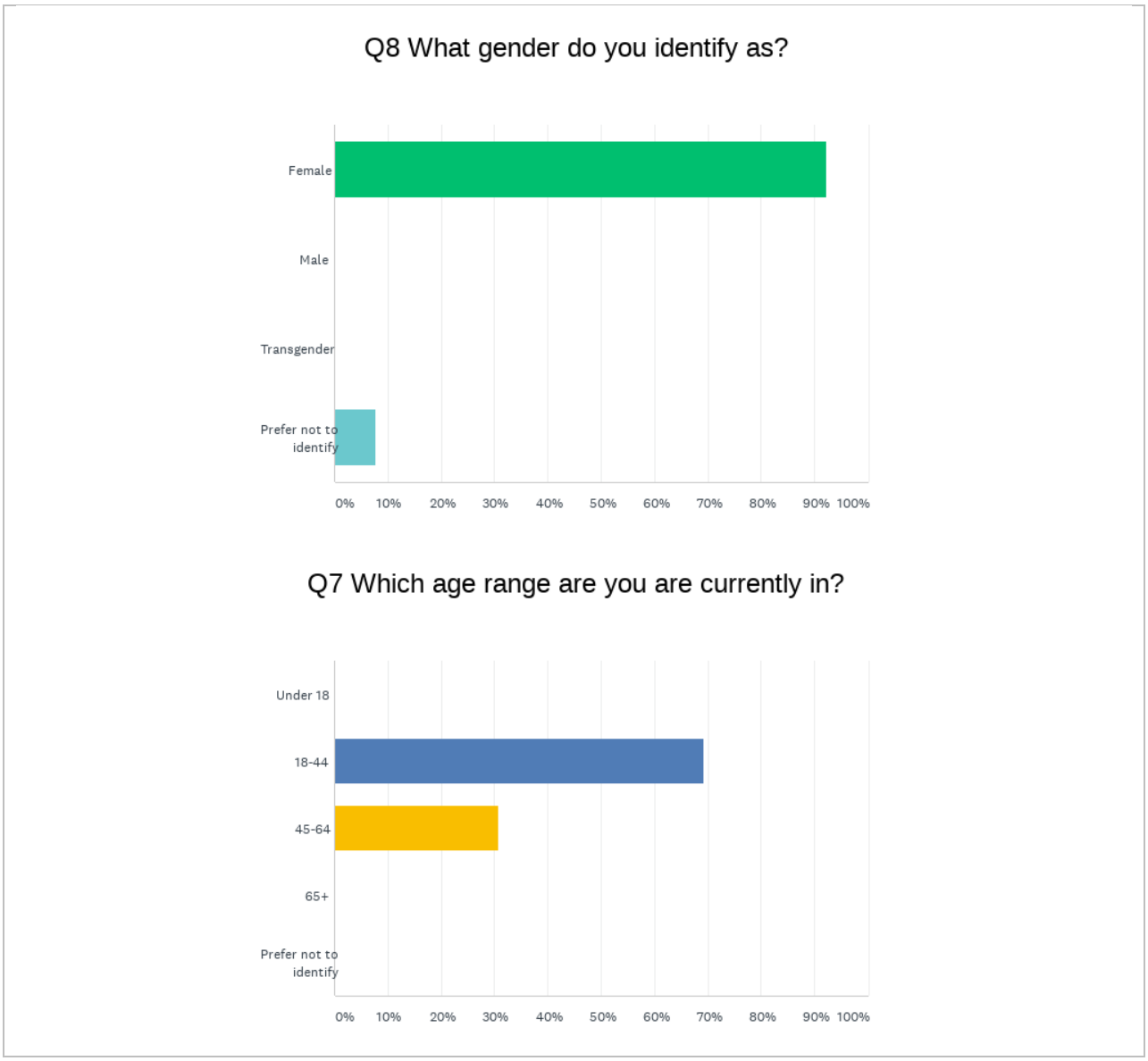
Location	Virtual Event
Time	Tuesday, June 29th, 3 PM

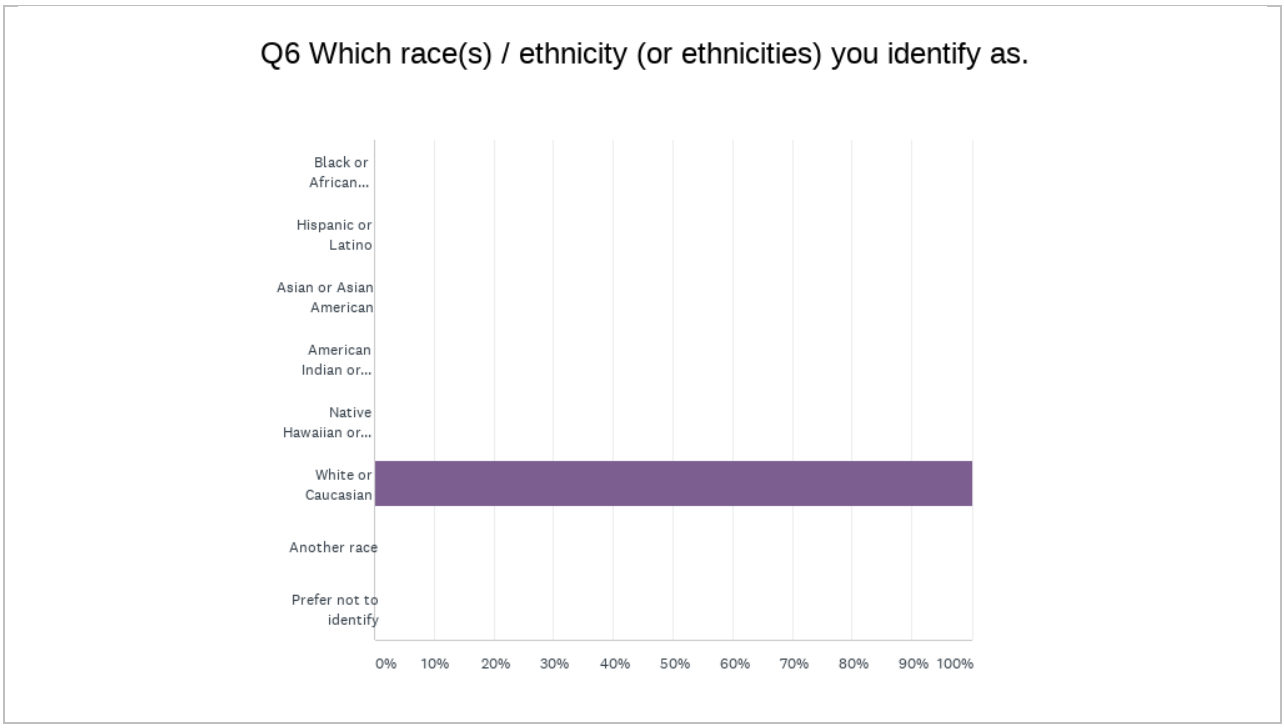
3.0 Public Comment Analysis

This section will be completed after the public comment period has been completed. Please note due to the volume of comments, analysis represents a summarization of all comments received. Technology specific comments will be included in Appendix C.

3.1 Summary of Response Volume

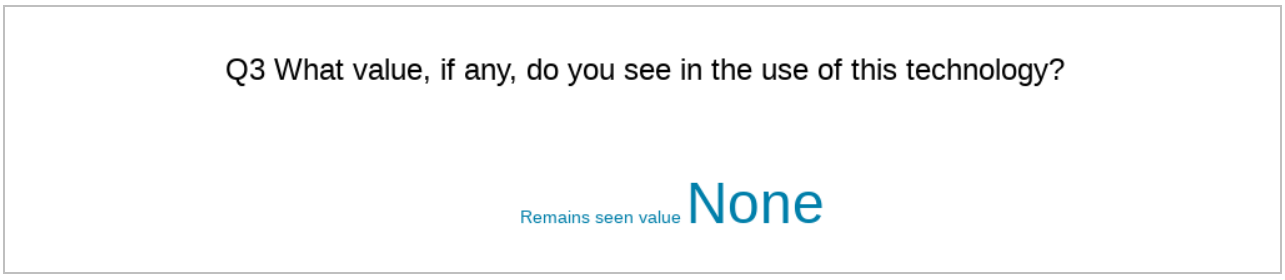

Q9 Which neighborhood do you currently reside in?
Ballard
Belltown
Beacon Hill
Capitol Hill
Central District
Columbia City
Delridge
First Hill
Georgetown
Greenwood / Phinney
International District
Interbay
North
Northeast
Northwest
Madison Park / Madison Valley
Magnolia
Queen Anne
Rainier Beach
Ravenna / Laurelhurst
South Lake Union /...
Southeast
Southwest
South Park
Uptown
Wallingford / Fremont
West Seattle
King county (outside...
Outside King County
Prefer not to identify
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%


Q8 What gender do you identify as?
Female
Male
Transgender
Prefer not to identify
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%
Q7 Which age range are you are currently in?
Under 18
18-44
45-64
65+
Prefer not to identify
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%


Q6 Which race(s) / ethnicity (or ethnicities) you identify as.
Black or African...
Hispanic or Latino
Asian or Asian American
American Indian or...
Native Hawaiian or...
White or Caucasian
Another race
Prefer not to identify
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%

3.2 Question One: What concerns, if any, do you have about the use of this technology?

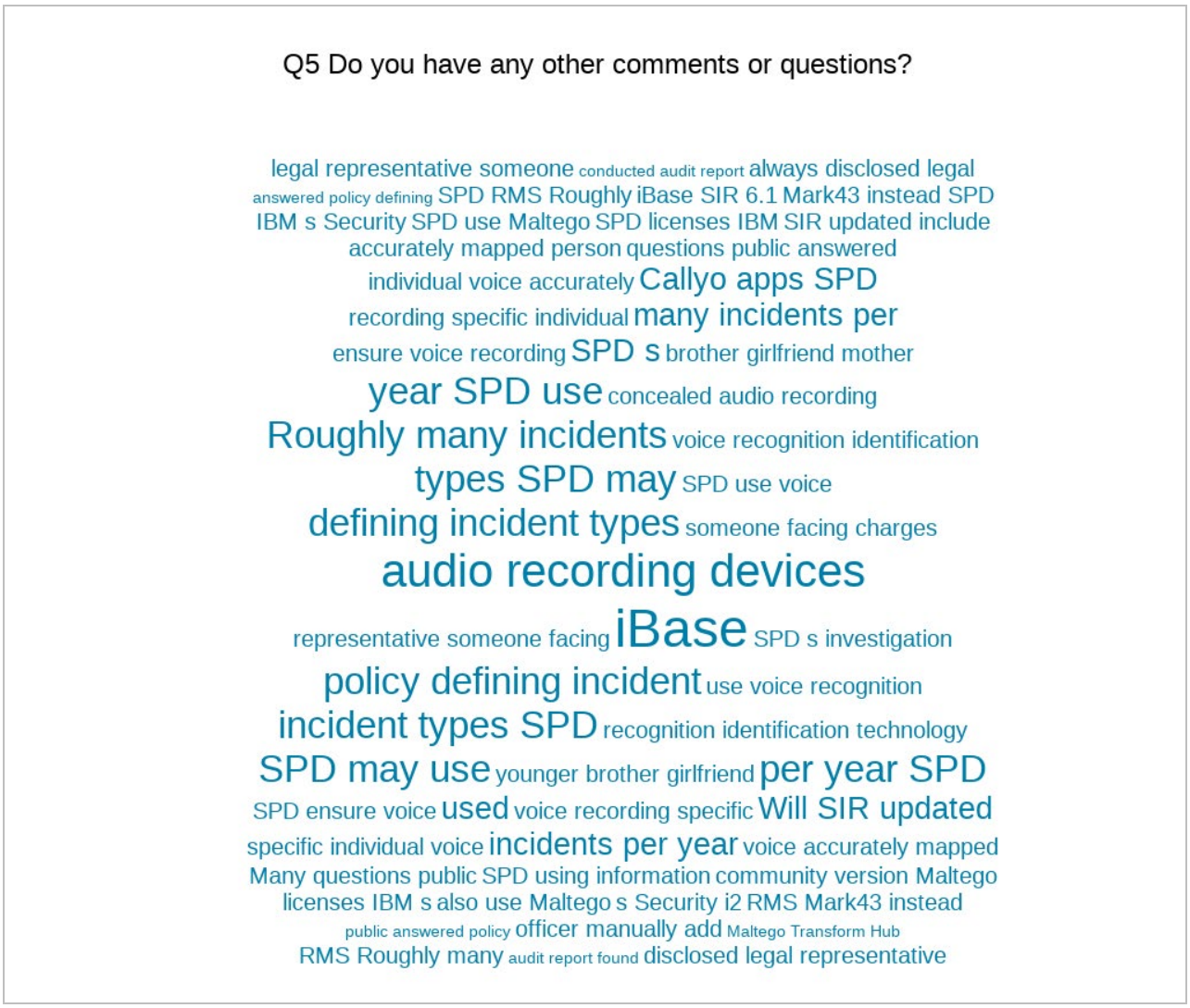
3.3 Question Two: What value, if any, do you see in the use of this technology?



3.4 Question Three: What would you want City leadership to consider when making a decision about the use of this technology?

3.5 General Surveillance Comments

These are comments received that are not particular to any technology currently under review.



4.0 Response to Public Comments

This section will be completed after the public comment period has been completed.

4.1 How will you address the concerns that have been identified by the public?

What program, policy and partnership strategies will you implement? What strategies address immediate impacts? Long-term impacts? What strategies address root causes of inequity listed above? How will you partner with stakeholders for long-term positive change?

5.0 Equity Annual Reporting

5.1 What metrics for this technology be reported to the CTO for the annual equity assessments?

Respond here.

Privacy and Civil Liberties Assessment

Purpose

This section shall be completed after public engagement has concluded and the department has completed the racial equity toolkit section above. The privacy and civil liberties assessment is completed by the community surveillance working group ("working group"), per the surveillance ordinance which states that the working group shall:

"Provide to the executive and the City Council a privacy and civil liberties impact assessment for each SIR that must be included with any departmental request for surveillance technology acquisition or in-use approval. The impact assessment shall include a description of the potential impact of the surveillance technology on civil rights and liberties and potential disparate impacts on communities of color and other marginalized communities. The CTO shall share with the working group a copy of the SIR that shall also be posted during the period of public engagement. At the conclusion of the public engagement period, the CTO shall share the final proposed SIR with the working group at least six weeks prior to submittal of the SIR to Council for approval. The working group shall provide its impact assessment in writing to the executive and the City Council for inclusion in the SIR within six weeks of receiving the final proposed SIR. If the working group does not provide the impact assessment before such time, the working group must ask for a two-week extension of time to City Council in writing. If the working group fails to submit an impact statement within eight weeks of receiving the SIR, the department and City Council may proceed with ordinance approval without the impact statement."

Working Group Privacy and Civil Liberties Assessment

From: Seattle Community Surveillance Working Group (CSWG)

To: Seattle City Council

Date: Oct 25, 2021

Re: Privacy and Civil Liberties Impact Assessment for Callyo

Executive Summary

The CSWG has completed its review of the Surveillance Impact Reports (SIRs) for the three surveillance technologies included in Group 4a of the Seattle Surveillance Ordinance technology review process. These technologies are Callyo, i2 iBase, Audio Recording Systems, and Maltego. This document is the CSWG's Privacy and Civil Liberties Impact Assessment for Callyo used by Seattle Police Department (SPD) as set forth in SMC 14.18.080(B)(1), which we provide for inclusion in the final SIRs submitted to the City Councils.

This document first provides our recommendations to Council, then provides background information, key concerns, and outstanding questions regarding Callyo technologies.

Our assessment of Callyo technologies as used by Seattle Police Department (SPD) focuses on three major issues:

1. Additional policy language is necessary to define a specific and restricted purpose of use.
2. There are inadequate policies regarding data collection and unclear policies regarding data storage, protection, and sharing.
3. There are inadequate oversight policies restricting Callyo technologies' additional surveillance features.

Recommendations

The Council should adopt clear and enforceable rules that ensure, at the minimum, the following:

1. The purpose and allowable uses of Callyo technologies must be clearly defined, and any SPD use of Callyo technologies and data collected with Callyo technologies must be restricted to that specific purpose and those allowable uses. The specific incident types for which Callyo technologies may be used must be stated.

2. SPD must disclose which specific Callyo technologies or applications it uses and under what circumstances SPD deploys which units.

3. All data collected through Callyo technologies must follow the issuance of a search warrant, or a clearly delineated consent process that sets enforceable rules limiting the types of data that may be collected.

4. Any data collected by Motorola must not be owned, used, or retained by Motorola, and any data housed on the Callyo cloud must be properly secured.

5. Data must be securely shared with third parties and properly deleted.

6. The must be a clear oversight and accountability processes ensuring that TESU officers delete data that fall outside the scope of a search warrant or consent statement and do not share that data with investigating officers.

7. There must be a requirement for an independent audit of SPD's use of Callyo technologies.

8. There must be a requirement that Callyo technologies are only used on SPD-issued devices (not personal devices) and Callyo applications should be promptly uninstalled from SPD devices after expiration of the search warrant or consent agreement.

9. There must be clear guidelines for securely storing and managing any data collected by Callyo technologies outside of call recordings, such as location data, and there must be provisions to ensure that data outside the scope of a search warrant or consent agreement are deleted.

10. There must be a requirement for SPD to ensure authenticity of recordings and individuals in Callyo-generated recordings.

11. There must be a requirement that data may only be added manually from Callyo technologies to SPD's RMS (Mark43), and that Callyo technologies does not have direct read or write access to SPD's RMS.

12. SPD must be required to disclose for how many incidents per year they use Callyo technologies.

13. There must be a prohibition on use of biometric identification technology on Callyo-generated recordings.

Key Concerns

1. **There are inadequate policies defining purpose of use.** The SIR does not fully describe the circumstances under which Callyo technologies may be used. It is unclear when call-masking may be used and whether Callyo technologies are the only recording application that SPD uses to record calls. Without clear purpose restrictions, officers may record conversations widely,

amassing unnecessary sensitive data and voice biometrics. Similarly, officers may inappropriately use call-masking technologies outside of any specific criminal investigation and undermine expectations of government transparency.

2. **It is unclear what specific Callyo technologies or applications SPD uses.** The vendor, Callyo, has various mobile apps including 10-21 Police Phone, 10-21 Video, 10-21 Flight, LiveWire, Pulse, VIP, and VoiceRecorder/Q-recorder. Without knowing which specific Callyo technologies are in use by SPD, it is difficult to assess SPD's use of these technologies.
3. **There is lack of clarity around requirements for a warrant.** The SIR states that Callyo technologies may only be used with a court order. Elsewhere, the SIR states that Callyo technologies' call recording functions may only be used with a search warrant. However, the city's webpage states, "Callyo may be used with consent or search warrant." Clarity is needed as to whether current rules allow officers to use some features of Callyo technologies based on consent alone. Such clarity is particularly important because the SIR repeatedly states that the search warrant determines what data can be properly collected via Callyo. Uses of Callyo technologies based on consent alone would not be subject to such parameters. The SIR fails to specify when officers can request consent and what content can be recorded based on that consent. Improper data collection is probable absent clearer guidelines.
4. **It is unclear how Callyo technologies may be used and by whom.** The SIR primarily addresses how a non-HRVU (High-Risk Victims Unit) officer or detective would have TESU (Technical and Electronic Support Unit) record their call. Any difference in process for recording the calls of non-officers is not detailed. The HRVU's Callyo use parameters are also only partially explicated despite HRVU's larger share of the annual Callyo budget. Without comprehensive guidelines ensuring that appropriate usage is tracked and data are properly managed, sensitive information may be improperly shared and tools like call masking may be used improperly.
5. **It is unclear if and how Motorola Solutions collects or retains data.** The SIR does not describe a contract between SPD and Motorola Solutions. While the SIR indicates that no "sharing partners" have "direct access" to Callyo data "while it resides in the [mobile phone] device," it is unclear what access there is to data that no longer resides in the devices and may instead be stored in Callyo's Cloud. While SPD stores Callyo recordings on its own systems, the SIR does not make clear whether data initially recorded in Callyo's app are also uploaded to Amazon Web Service's GovCloud, which hosts Callyo's cloud and appears to store its data. If data are stored on Callyo's Cloud system without contractual restrictions, Motorola Solutions may be able to review and parse private recording data, or even share or sell that data to third parties. The SIR does not mention any such cloud storage or other data collection by Motorola Solutions, leaving open the possibility that Motorola has access to highly sensitive information.
6. **There are inadequate data sharing policies.** The SIR offers only an extremely general description of who might receive Callyo data and how such data would be shared. Neither security protocols for transferring data nor for ensuring that shared data are properly deleted are explicated in the SIR. Indefinite retention of data and insecure sharing processes could lead to exposure of sensitive data, with manifold consequences for those recorded – from safety risks for witnesses to discovery of private information by employers.
7. **There are inadequate data retention policies.** The SIR states that devices that collect no relevant evidence, per the terms of the court order, are purged in their entirety by TESU staff and no data are provided to the investigating officer. However, protocols to ensure that TESU staff properly execute these determinations are not detailed fully. Additional clarity is needed as to how deletions are determined, and how frequently supervising officers review the th that is shared with investigating officers. Indefinite and improper data storage could lead sensitive data to be shared publicly or could lead SPD officers to use improperly collected data in the course of an investigation – subjecting those investigated to an overreach of police powers.
8. **There are inadequate oversight policies.** Callyo advertises that the call masking on its 10-21 phone application "diverts millions of calls away from dispatch centers each year" by enabling officers to communicate with members of the public directly. SPD does not provide data on the

number of calls that might be diverted, but any such calls would no longer be subject to the systematic tracking and oversight which centralized dispatch systems provide. This arrangement makes it easier for individual officers to unilaterally control communications with members of the public and use that communication control to abuse their power.

9. **There are no policies restricting use of Callyo's surveillance features.** Callyo can be integrated with other law enforcement-focused Amazon Web Services technologies in ways that makes it surveillance capabilities more forceful. Callyo also includes numerous additional surveillance features, such as video recording and live-streaming and "10-21 Flight," which allows officers to perform surveillance using drones. The SIR describes no policy which would prevent SPD from using these Callyo features in the future. Videos captured by Callyo could be stored and later entered into facial recognition programs, which have been widely found to be racially biased. Drone video tools can be and have been used to track and observe protestors, improperly subjecting political organizers to targeted surveillance and chilling freedoms of speech and association.

Outstanding Questions

- What are all the specific Callyo applications/technologies that SPD uses?
- Does Callyo collect location data? If so, how and when is location tracked and what policies govern recording and storage of location data?
- Can Callyo be used without a warrant, based on two-party consent alone? If so, when may it be used without a warrant, how is consent obtained, and what rules set the parameters for Callyo's use?
- When Callyo is used on calls between a third party (i.e. a cooperating witness) and an unknowing participant, how does the recording process differ compared to Callyo's use for recordings of officers in phone conversations?
- How and when is call masking used and what policies govern usage of that feature?
- How does the HRVU use Callyo and what guidelines govern its use? Does the HRVU ever use Callyo functions besides call masking, such as location tracking?
- Does the HRVU use Callyo to collect data – such as the phone numbers called – and how are data stored and/or shared?
- Does SPD have a contract with Motorola Solutions for its use of Callyo? If so, what are the agreement's provisions?
- Where are audio recordings initially stored? Are they ever stored anywhere besides the original recording device and the thumb drive submitted to the investigating officer, such as on the Callyo cloud?
- Who owns the data collected by Callyo? Does Motorola have access to or store the collected data at any point? If so, what are Motorola's data security practices with respect to the data collected?
- How are data shared with third parties? How is that data monitored for deletion within the appropriate time frame?
- When did the last audit of the TESU and Callyo occur? What were the results?

The answers to these questions can further inform the content of any binding policy the Council chooses to include in an ordinance on this technology, as recommended above.

Appendix A: Glossary

Accountable: (taken from the racial equity toolkit.) Responsive to the needs and concerns of those most impacted by the issues you are working on, particularly to communities of color and those historically underrepresented in the civic process.

Community outcomes: (taken from the racial equity toolkit.) The specific result you are seeking to achieve that advances racial equity.

Contracting equity: (taken from the racial equity toolkit.) Efforts to achieve equitable racial outcomes in the way the City spends resources, including goods and services, consultants and contracting.

DON: "department of neighborhoods."

Immigrant and refugee access to services: (taken from the racial equity toolkit.) Government services and resources are easily available and understandable to all Seattle residents, including non-native English speakers. Full and active participation of immigrant and refugee communities exists in Seattle's civic, economic and cultural life.

Inclusive outreach and public engagement: (taken from the racial equity toolkit.) Processes inclusive of people of diverse races, cultures, gender identities, sexual orientations and socio-economic status. Access to information, resources and civic processes so community members can effectively engage in the design and delivery of public services.

Individual racism: (taken from the racial equity toolkit.) Pre-judgment, bias, stereotypes about an individual or group based on race. The impacts of racism on individuals including white people internalizing privilege, and people of color internalizing oppression.

Institutional racism: (taken from the racial equity toolkit.) Organizational programs, policies or procedures that work to the benefit of white people and to the detriment of people of color, usually unintentionally or inadvertently.

OCR: "Office of Civil Rights."

Opportunity areas: (taken from the racial equity toolkit.) One of seven issue areas the City of Seattle is working on in partnership with the community to eliminate racial disparities and create racial equity. They include: education, health, community development, criminal justice, jobs, housing, and the environment.

Racial equity: (taken from the racial equity toolkit.) When social, economic and political opportunities are not predicted based upon a person's race.

Racial inequity: (taken from the racial equity toolkit.) When a person's race can predict their social, economic, and political opportunities and outcomes.

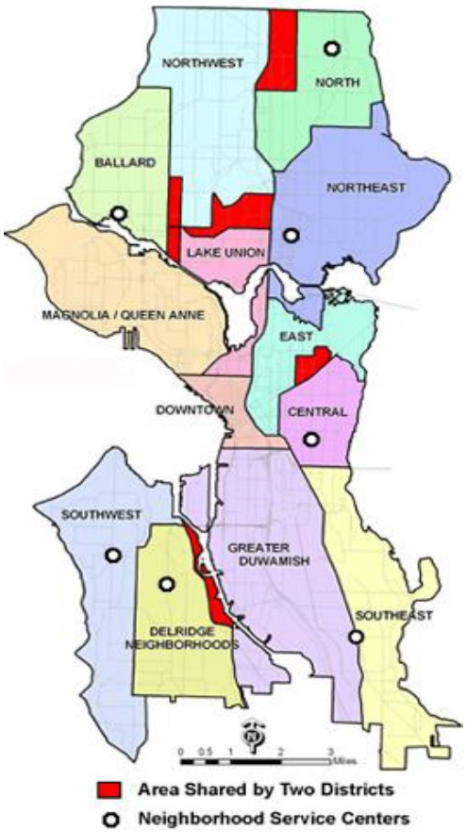
RET: "racial equity toolkit"

Seattle neighborhoods: (taken from the racial equity toolkit neighborhood.) Boundaries defined for the purpose of understanding geographic areas in Seattle.

Stakeholders: (taken from the racial equity toolkit.) Those impacted by proposed policy, program, or budget issue who have potential concerns or issue expertise. Examples might include: specific racial/ethnic groups, other institutions like Seattle housing authority, schools, community-based organizations, change teams, City employees, unions, etc.

Structural racism: (taken from the racial equity toolkit.) The interplay of policies, practices and programs of multiple institutions which leads to adverse outcomes and conditions for communities of color compared to white communities that occurs within the context of racialized historical and cultural conditions.

Surveillance ordinance: Seattle City Council passed ordinance 125376, also referred to as the "surveillance ordinance."



SIR: "surveillance impact report", a document which captures the fulfillment of the Council-defined surveillance technology review process, as required by ordinance 125376.

Workforce equity: (taken from the racial equity toolkit.) Ensure the City's workforce diversity reflects the diversity of Seattle.

Appendix B: Meeting Notice(s)

Seattle

English
Google Translate Disclaimer

Tech Talk
Seattle Information Technology

HOME TOPICS

Home / Privacy

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Fourth Public Comment Period Opening for Technologies Subject to the City's Surveillance Ordinance

by Seattle IT on May 26, 2021

The City of Seattle has published the fourth set of draft Surveillance Impact Reports (SIRs) for four of the 26 currently existing surveillance technologies, per the Surveillance Ordinance.

The City of Seattle is looking for the public's input on the SIRs to help the provide the City Council with insight into community perspective and ensure City policies responsibly govern the use of these technologies.

The public comment period is currently open and runs through June 30, 2021. The complete list of technologies in this group for review, can be found below. We have three ways to allow residents to provide input and share their concerns:

1. Residents can submit their surveillance comments on each technology online at: City of Seattle Privacy website.
2. Seattle residents can also mail comments to Attn: Surveillance & Privacy Program, Seattle IT, PO Box 94709, Seattle, WA 98124
3. City Surveillance Technology Event: The City will hold virtual events to allow attendees ask questions from department technology experts and hear from City leadership. These virtual events will take place over using Webex and participants can join via online or the phone. Links and times are as follows:

Thursday, June 10, noon to 1 p.m.
Link to join: https://seattle.webex.com/seattle/j.php?MTID=mdfa673054e3236adb179613c69692067
Phone number to call in:+1-206-207-1700
Event number (access code): 187 147 0595

Tuesday, June 29, 3-4 p.m.
Link to join: https://seattle.webex.com/seattle/j.php?MTID=me51f66a7150a8e16ca6e3220e25449fd
Phone number to call in: +1-206-207-1700
Event number (access code): 187 172 4351

*More information on these technologies, as well as the City of Seattle's Privacy program, can be found online at the **City of Seattle's Privacy website**.*

This public input period is a valuable part of our process. The City of Seattle is committed to being transparent and accountable. Hearing from residents is part of the process. We welcome your thoughts and comments and look forward to hearing them.

Seattle Police Department's Callyo

Seattle Police Department's Callyo technology is under review for public comment as a retroactive surveillance technology. This software may be installed on an officer's cell phone to allow them to record the audio from phone communications between law enforcement and suspects. Callyo may be used with consent or search warrant.

Seattle Police Department's Audio Recording Devices

Seattle Police Department's Audio Recording Device technology is under review for public comment as a retroactive surveillance technology. This technology consists of a hidden microphone to audio record individuals without their knowledge. The microphone is either not visible to the subject being recorded or is disguised as another object. Used with search warrant or signed Authorization to Intercept (RCW 9A.73.200).

Seattle Police Department's I2 iBase

Seattle Police Department's I2 iBase technology is under review for public comment as a retroactive surveillance technology. The I2 iBase crime analysis tool allows for configuring, capturing, controlling, analyzing and displaying complex information and relationships in link and entity data. iBase is both a database application, as well as a modeling and analysis tool. It uses data pulled from SPD's existing systems for modeling and analysis.

Seattle Police Department's Maltego

Seattle Police Department's Maltego technology is under review for public comment as a retroactive surveillance technology. Maltego is an interactive data mining tool that renders graphs for link analysis. The tool is used in online investigations for finding relationships between pieces of information from various sources located on the internet.

Filed Under: Privacy
Tagged With: surveillance cameras, surveillance ordinance, Surveillance technology

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Appendix C: All Comments Received from Members of the Public

ID: 12841224701

Submitted Through: Online Comment

Date: 7/23/2021 3:52:28 PM

Which surveillance technology that is currently open for public comment, do you wish to comment on?

SPD: Callyo

What concerns, if any, do you have about the use of this technology?

Very little time was allocated for questions from the public at the Group 4a public engagement meetings. Additionally, SPD dodged providing answers to some of the questions. As such, numerous questions from the public have not been answered and thus greatly hinder the ability for informed public comment. My open questions on SPD's use of Callyo apps are in the response to question #5 in this survey. Since the safest approach (security-/privacy-wise) is to assume the worst as the missing answers to these open questions, my list of concerns will do the same. Thus, these concerns include: (1) Ambiguity from SPD in the Callyo SIR item 3.1 regarding deployment of the technology. SPD didn't clearly specify (aside from the HRVU) if Callyo apps are only deployed by the TESU when there's a court order; or if there are TESU Callyo app deployments that don't need a court order. If the HRVU is the only SPD unit that uses Callyo solely for call masking, then this means that all TESU deployments involve some form of court-approved privacy invasion (call recording, GPS location, etc). (2) The Callyo SIR item 3.1 is also ambiguous regarding whether Callyo apps are continuously installed on SPD cell phones (such as by the apps being pre-installed on the phones); or if the TESU installs and then later uninstalls the Callyo apps after each court-approved deployment. If the apps are continuously present on the devices, then this presents the risk for mis-use/abuse of the technology via officers using it outside of a court order. (3) SPD is withholding information from the public about which Callyo apps SPD uses. Callyo is just the name of the company (which was bought by Motorola). Callyo makes multiple apps: 10-21 Police Phone, 10-21 Video, 10-21 Flight, LiveWire, Pulse, VIP, and VoiceRecorder/Q-recorder. SPD has not been transparent about the technology they use. One point of the Seattle Surveillance Ordinance (SMC 14.18) was to bring the surveillance technologies to light so that they could have a robust public assessment. This is not possible when SPD is choosing to keep the apps they use secret. This should not be permissible. SPD must disclose the apps they use. (4) Potentially weakened security and auditability if SPD allows officers to use Callyo apps on non-department-issued-devices (such officer's personal cell phones). (5) Lack of informed/valid consent if SPD leverages any Callyo apps installed on a civilian's phone (such as Callyo Pulse possibly being used by an informant & SPD using LiveWire to track the informant's GPS location and/or collect audio). This could lead to a member of the public feeling like they must consent to being tracked by the City in order to get SPD off their backs. Consent given under duress isn't consent. Due to the powder dynamics in play, Callyo apps should not be used on civilian phones. (6) Lack of transparency regarding whether SPD is using the Free or the Premium/Enterprise version of Callyo apps. (7) No audit (by OIG/APRS/etc) of SPD's Callyo call records (such as, to confirm the uses of Callyo apps match TESU request logs). If such an audit has been performed, then SPD has not disclosed the report to the public. (8) No policy defining or limiting the (CAD/etc) incident types for which SPD may use Callyo apps. (9) The potential use of voice recognition/identification technology on the Callyo-generated recordings. (10) Missing information due to SPD not specifying any information about the GPS data in the Callyo SIR items 4.0 and 6.0. One can only safely assume that the collection, use, sharing, & accuracy of GPS data by SPD via Callyo apps are poorly handled, otherwise why hide it. (11) Lack of transparency (again) about whether the Callyo suite of apps are the only software/systems from Motorola Solutions Command Center used by SPD. (12) Lack of auditability & ownership of data; and potential weakened security due to the storage of Callyo-generated data in the cloud, not on servers owned by the City. The City is at the whims of

Callyo/Motorola regarding how secure the data is stored, whether it's stored durably/redundantly, who has access to the data, when/how the data is permanently deleted, whether they get audited, etc. Basically the City has less control over the data lifecycle since the City is entirely relying on Callyo/Motorola. (13) Lack of clarity regarding the data lifecycle for all subsets of data (i.e. data used as evidence, data not considered evidence, accidently collected data, etc). (14) Potential for security risk if Callyo has write access to the SPD RMS (Mark43), as opposed to an officer manually adding data from Callyo apps to the RMS. (15) Lack of clarity regarding the magnitude of the use of Callyo apps by SPD. SPD has not specified how many incidents per year they use Callyo apps for. (16) Possible issues with authenticity and authentication of target individuals in Callyo-generated recordings. Specifically, it is unclear how SPD accurately maps a voice in a recording to a certain person.

What value, if any, do you see in the use of this technology?

None.

What do you want City leadership to consider about the use of this technology?

SPD shouldn't surveil residents. SPD doesn't need more tools, or more money. The community needs support so these pipelines to the criminal system are fixed. Those systemic problems aren't fixed by SPD having more tools. As such, I recommend that City leadership stop funding this tool. Given City leadership's past history on prior surveillance technologies, I suspect they won't do what is fundamentally right and instead will pursue limited cosmetic changes. As such, here are some superficial changes that could be made: (1) Require SPD to answer all of the public's questions. (2) Require SPD to update the Callyo SIR to clarify aspects of which units deploy which Callyo apps under which circumstances. (3) Require that Callyo apps are promptly uninstalled from SPD devices after the court order expires (if not sooner), so as to minimize mis-use/abuse of the apps. (4) Require SPD to update the Callyo SIR to include which apps SPD uses: 10-21 Police Phone, 10-21 Video, 10-21 Flight, LiveWire, Pulse, VIP, and/or VoiceRecorder/Q-recorder. (5) Require that SPD only use Callyo apps on SPD-issued devices, not officer's personal devices or civilian-owned devices. (6) Require SPD to clarify if they use the Free or the Premium/Enterprise version of Callyo apps. (7) Require SPD to publicly provide the date and report from the most recent audit of SPD's use of Callyo apps. (8) Require SPD Policy to state which specific incident types for which Callyo apps may be used. (9) Ban the use of voice recognition/identification technology on the Callyo-generated recordings. (10) Require SPD to update the Callyo SIR items 4.0 and 6.0 to include coverage of GPS data. In the meantime, the public can only safely assume that the collection, use, sharing, & accuracy of GPS data by SPD via Callyo apps are poorly handled, otherwise why hide it. (11) Require SPD to disclose whether the Callyo suite of apps are the only software/systems from Motorola Solutions Command Center used by SPD. (12) Given the weakened security, auditability, and ownership of data due to the storage of Callyo-generated data in the cloud, not on servers owned by the City. The City is at the whims of Callyo/Motorola regarding how secure the data is stored, whether it's stored durably/redundantly, who has access to the data, when/how the data is permanently deleted, whether they get audited, etc. Basically the City has less control over the data lifecycle since the City is entirely relying on Callyo/Motorola. As such, the City should strongly consider using a different solution. (13) Require SPD to update the Callyo SIR to fully clarify the data lifecycle for all subsets of data (i.e. data used as evidence, data not considered evidence, accidently collected data, etc). (14) Improve security by requiring that SPD's Callyo apps don't have direct read or write access to the SPD RMS (Mark43). Instead, require that an officer manually add data from a Callyo app to the RMS on an as needed basis. (15) Require SPD to disclose how many incidents per year they use Callyo apps for. (16) Require SPD to disclose how they ensure authenticity of recordings and authentication of target individuals in Callyo-generated recordings. Specifically, it is unclear how SPD accurately maps a voice in a recording to a certain person (and that the rcording is not forged/fraudulent).

Do you have any other comments or questions?

Many questions from the public have not been answered, such as: (1) The deployment of Callyo by TESU in the SIR is ambiguous: Aside from the HRVU, is Callyo only deployed by the TESU when there's a court order; or are there TESU Callyo deployments that don't need a court-order? That is, is the HRVU the only dept that uses Callyo solely for call masking? (2) Is Callyo pre-installed on SPD-issued cell phones; or does the TESU install and then remove the app after each court-approved deployment? (3) What are all the Callyo apps that SPD uses (10-21 Police Phone/Video/Flight, LiveWire/Pulse, VIP, VoiceRecorder/Q-recorder)? (4) Does SPD leverage any Callyo apps installed on a civilian's phone (such as Callyo Pulse possibly being used by an informant & SPD using LiveWire to track the informant's GPS location and/or collect audio)? (5) Is SPD using the Free or the Premium/Enterprise version of Callyo apps? (6) Is there any SPD policy prohibiting installing/using Callyo on officer's personal cell phones, as opposed to dept.-issued phones? (7) Has there been an audit (by OIG/APRS/etc) of SPD's Callyo call records (such as, to confirm the uses of Callyo match TESU request logs)? If so, when was the last such audit and where can the report be found? (8) Is there any policy defining the incident types for which SPD may use Callyo? (9) Does SPD use any voice recognition/identification technology on the Callyo recordings? (10) Section 1.0 of the Callyo SIR mentions one use being "GPS locate the phone of a caller". Sections 4.0 & 6.0 do not include information about the GPS data. Will the SIR be getting updated to include coverage of GPS data? (11) Are the Callyo suite of apps the only software/systems from Motorola Solutions Command Center used by SPD? (12a) The Callyo SIR mentions the data is extracted onto a thumb drive & submitted as evidence: Before the recordings are extracted, does Callyo store the audio recordings on the mobile device or are they stored in the cloud? (12b) What happens to the data within Callyo afterward SPD deems it superfluous or retains as evidence - that is, does SPD have control over the data lifecycle within Callyo? (13) Is Callyo integrated with SPD's RMS (Mark43) or instead does an SPD officer manually add the Callyo data to the SPD RMS? (14) Roughly how many incidents per year does SPD use Callyo apps for? (15) How does SPD ensure that the voice in a recording is that of a specific individual? How is the voice accurately mapped to a person?

ID: 12746755854

Submitted Through: Online Comment

Date: 6/15/2021 6:55:32 PM

Which surveillance technology that is currently open for public comment, do you wish to comment on?

SPD: Callyo

What concerns, if any, do you have about the use of this technology?

Surveillance is always a concern.

What value, if any, do you see in the use of this technology?

Remains to be seen if there is a value.

What do you want City leadership to consider about the use of this technology?

TBD, valid considerations would depend on SPD answering the public's questions.

Do you have any other comments or questions?

1) The deployment of Callyo by TESU in the SIR is ambiguous: Aside from the HRVU, is Callyo only deployed by the TESU when there's a court order; or are there TESU Callyo deployments that don't need a court-order? That is, is the HRVU the only dept that uses Callyo solely for call masking? 2) Is Callyo pre-installed on SPD-issued cell phones; or does the TESU install and then remove the app after each court-approved deployment? 3) What are all the Callyo apps that SPD uses (10-21 Police Phone/Video/Flight, LiveWire/Pulse, VIP, VoiceRecorder/Q-recorder)? 4) Does SPD leverage any Callyo apps installed on a civilian's phone (such as Callyo Pulse possibly being used by an informant & SPD using LiveWire to track the informant's GPS location and/or collect audio)? 5) Is SPD using the Free or the Premium/Enterprise version of Callyo apps? 6) Is there any SPD policy prohibiting installing/using Callyo on officer's personal cell phones, as opposed to dept.-issued phones? 7) Has there been an audit (by OIG/APRS/etc) of SPD's Callyo call records (such as, to confirm the uses of Callyo match TESU request logs)? If so, when was the last such audit and where can the report be found? 8) Is there any policy defining the incident types for which SPD may use Callyo? 9) Does SPD use any voice recognition/identification technology on the Callyo recordings? 10) Section 1.0 of the Callyo SIR mentions one use being "GPS locate the phone of a caller". Sections 4.0 & 6.0 do not include information about the GPS data. Will the SIR be getting updated to include coverage of GPS data? 11) Are the Callyo suite of apps the only software/systems from Motorola Solutions Command Center used by SPD? 12a) The Callyo SIR mentions the data is extracted onto a thumb drive & submitted as evidence: Before the recordings are extracted, does Callyo store the audio recordings on the mobile device or are they stored in the cloud? 12b) What happens to the data within Callyo afterward SPD deems it superfluous or retains as evidence - that is, does SPD have control over the data lifecycle within Callyo? 13) Is Callyo integrated with SPD's RMS (Mark43) or instead does an SPD officer manually add the Callyo data to the SPD RMS? 14) Roughly how many incidents per year does SPD use Callyo apps for? 15) How does SPD ensure that the voice in a recording is that of a specific individual? How is the voice accurately mapped to a person?

ID: 12698216584

Submitted Through: Online Comment

Date: 5/28/2021 2:20:32 PM

Which surveillance technology that is currently open for public comment, do you wish to comment on?

SPD: Callyo

What concerns, if any, do you have about the use of this technology?

Privacy.

What value, if any, do you see in the use of this technology?

None

What do you want City leadership to consider about the use of this technology?

We don't need more surveillance

Do you have any other comments or questions?

Appendix D: Letters from Organizations or Commissions

July 23, 2021

Seattle Information Technology
700 5th Ave, Suite 2700
Seattle, WA 98104

RE: ACLU of Washington Comments on Group 4a Surveillance Technologies

On behalf of the ACLU of Washington, I write to offer our comments on the surveillance technologies included in Group 4a of the Seattle Surveillance Ordinance implementation process.

AMERICAN CIVIL LIBERTIES UNION
Washington

P.O. Box 2728
Seattle, WA 98111-2728
(206) 624-2184
aclu-wa.org

Michele Storms
Executive Director

The four Seattle Police Department (SPD) technologies in Group 4a are covered in the following order:

1. Callyo
2. i2 iBase
3. Audio Recording Systems
4. Maltego

These comments should be considered preliminary, given that the Surveillance Impact Reports (SIR) for each technology leave a number of important questions unanswered. Specific unanswered questions for each technology are noted in the comments relating to that technology. Answers to these questions should be included in the updated SIRs provided to the Community Surveillance Working Group and to the City Council prior to their review of the technologies.

Callyo

I. *Background*

Callyo is a mobile phone identification masking and recording technology. It raises privacy and civil liberties concerns because it enables law enforcement to surreptitiously record individuals' conversations, and possibly their location data, without their knowledge or consent.

Because voice is a biometric identifier, audio data can be used to surreptitiously identify and track individuals. Any audio data collected could be used with voice recognition software that may contains inaccuracies and built-in race and gender biases.[1] Such audio could be later input into a voice recognition or biometrics database, which may further enable both corporate and government surveillance.[2]

[1] Voice recognition technologies already in use, such as Voice AI, are more likely to accurately respond to white people and men. See, for instance, Joan Bajorek, "Voice Recognition Still Has Significant Race and Gender Biases," *Harvard Business Review*, May 10, 2019, https://hbr.org/2019/05/voice-recognition-still-has-significant-race-and-gender-biases.

[2] Law enforcement agencies already use such programs and the creation of vocal recognition databases is underway. See, for instance, Michael Dumiak, "Interpol's New Software Will Recognize Criminals by Their Voices," *Spectrum.IEEE.org*, May 16, 2018, https://spectrum.ieee.org/tech-talk/consumer-electronics/audiovideo/interpols-new-automated-platform-will-recognize-criminals-by-their-voice;

SPD's possible collection of location data with Callyo raises further concerns. While an SPD representative stated that Callyo only tracks the GPS location of SPD phones and cannot collect other location data,[3] the Surveillance Impact Report (SIR) states that Callyo *is* used to GPS locate individuals.[4] The lack of clarity around SPD's collection of individuals' GPS data raises location-tracking concerns. Law enforcement can use geo-location data to conduct real-time surveillance of individuals without their knowledge or consent. Location data can reveal highly sensitive information about people's behaviors, social patterns, and personal life, including political activities in which they engage, with whom they associate, and what religion they practice. Digitally collected location data also may be improperly and inaccurately used in criminal investigations.[5] Location tracking therefore impinges upon basic privacy and due process rights and impedes individuals' abilities to enjoy their everyday lives free from fear of surveillance.

SPD's use of Callyo raises serious concerns. SPD policies described in the SIR do not include purpose limitations, adequate privacy and security protections, or clear restrictions on use. The SIR does not include a contract with the vendor, Motorola Solutions, and it is unclear whether there are contractual restrictions on data use and sharing.

Given the lack of adequate policies described by the SIR and the number of unanswered questions that remain, we have concerns that SPD's use of Callyo may infringe upon people's civil rights and civil liberties.

II. *Specific Concerns*

a. **Lack of Clarity Around Requirements for a Warrant:** The SIR states that Callyo's functions can only be used with a court order.[6] Elsewhere, the SIR states that Callyo's call recording functions may only be used with a search warrant.[7] However, the city's webpage states, "Callyo may be used with consent or search warrant." [8] Comments at the June 10th and July 20th public engagement meeting also suggested that consent might be sufficient to use Callyo. Clarity is needed as to whether current rules allow officers to use some features of Callyo based on consent alone. Such clarity is particularly important because the SIR repeatedly states that the search

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"Speaker Identification" *GoVivace.com*, Accessed June 10, 2021, https://www.govivace.com/products/speaker-identification/; "Voice Authentication," *Aware Biometrics*, Accessed June 10, 2021, https://www.aware.com/voice-authentication/; 'Forensic Voice Analysis," *Sestek.com*, Accessed June 10, 2021, https://www.sestek.com/forensic-voice-analysis/; "Voice Inspector for Forensic Experts," *Phonexia.com*, Accessed June 10, 2021, https://www.phonexia.com/en/use-case/audio-forensics-software/.

[3] City of Seattle IT Department, "Group 4a Surveillance Technologies Public Meeting 1 20210610 1903 1," Accessed July 21, 2021, https://www.youtube.com/watch?v=I0FVEt2oyy8.

[4] Seattle Police Department, "2021 Surveillance Impact Report: Callyo," Accessed June 7, 2021, https://www.seattle.gov/Documents/Departments/Tech/Privacy/Public%20Engagement%20SIR%20-%20Callyo.pdf, 5-7.

[5] "Police Could Get Your Location Data Without a Warrant. This Has to End," *Wired*, February 2, 2017, https://www.wired.com/2017/02/police-get-location-data-without-warrant-end/.

[6] SPD, "Callyo," 5.

[7] Ibid., 7, 10, and 11.

[8] "Surveillance Technologies Under Review," *Seattle.gov*, Accessed June 6, 2021, https://www.seattle.gov/tech/initiatives/privacy/surveillance-technologies.

warrant determines what data can be properly collected via Callyo.[9] Uses of Callyo based on consent alone would not be subject to such parameters. The SIR fails to specify when officers can request consent and what content can be recorded based on that consent. Improper data collection is probable absent clearer guidelines.

b. **Inadequate Policies Defining Purpose of Use.** The SIR does not fully describe the circumstances under which Callyo may be used. It is unclear when call-masking may be used and whether Callyo is the only recording application that SPD uses to record calls. Without clear purpose restrictions, officers may record conversations widely, amassing unnecessary sensitive data and voice biometrics. Similarly, officers may inappropriately use call-masking technologies outside of any specific criminal investigation and undermine expectations of government transparency.

c. **Lack of Clarity on How Callyo May be Used and By Whom.** The SIR primarily addresses how a non-HRVU (High-Risk Victims Unit) officer or detective would have TESU (Technical and Electronic Support Unit) record their call. Any difference in process for recording the calls of non-officers (i.e. calls made by cooperating witnesses) is not detailed. The HRVU's Callyo use parameters are also only partially explicated,[10] despite HRVU's larger share of the annual Callyo budget.[11] Without comprehensive guidelines ensuring that appropriate usage is tracked and data is properly managed, sensitive information may be improperly shared and tools like call masking may be used improperly.

d. **Lack of Clarity on Motorola Solutions' Data Collection and Retention.** The SIR does not describe a contract between SPD and Motorola Solutions, leaving it unclear whether Motorola collects or retains data. While the SIR indicates that no "sharing partners" have "direct access" to Callyo data "while it resides in the [mobile phone] device,"[12] it is unclear what access there is to data that no longer resides in the devices and may instead be stored in Callyo's cloud.[13] While SPD stores Callyo recordings on its own systems, the SIR does not make clear whether data initially recorded in Callyo's app is also uploaded to Amazon Web Service's GovCloud, which hosts Callyo's cloud and appears to store its data.[14] When asked about possible Motorola collection of Callyo data during the July 20th public engagement meeting, the SPD representative expressed uncertainty as to whether the vendor might access or store some data. If data is stored on Callyo's cloud system without contractual restrictions, Motorola Solutions may be able to review and parse private recording data, or even share or sell that data to third parties. The SIR does not mention any such

[9] SPD, "Callyo," 10, 11, 13, and 17.
[10] Ibid., 7-11.
[11] Ibid., 18.
[12] Ibid., 14.
[13] "Investigative Solutions," *Callyo.com*, Accessed June 16, 2021, https://callyo.com/investigations/investigative-solutions.
[14] "Callyo," *Amazon Web Services*, https://partners.amazonaws.com/partners/0010L00001pBHaCQAW/Callyo; "10-21 Video" *Callyo.com*, Accessed June 7, 2021, https://callyo.com/public-safety/10-21-video.

cloud storage or other data collection by Motorola Solutions, leaving open the possibility that Motorola has access to highly sensitive information.

e. **Inadequate Data Sharing Policies.** The SIR offers only an extremely general description of who might receive Callyo data and how such data would be shared.[15] Neither security protocols for transferring data nor for ensuring that shared data is properly deleted are explicated in the SIR. Indefinite retention of data and insecure sharing processes could lead to exposure of sensitive data, with manifold consequences for those recorded – from safety risks for witnesses to discovery of private information by employers.

f. **Inadequate Data Retention Policies.** The SIR states that devices that collect no relevant evidence, per the terms of the court order, are purged in their entirety by TESU staff and no data is provided to the investigating officer.[16] However, protocols to ensure that TESU staff properly execute these determinations are not detailed fully. Additional clarity is needed as to how deletions are determined, and how frequently supervising officers review the data that is shared with investigating officers.[17] Indefinite and improper data storage could lead sensitive data to be shared publicly or could lead SPD officers to use improperly collected data in the course of an investigation – subjecting those investigated to an overreach of police powers.

g. **Inadequate Oversight Policies.** Callyo advertises that the call masking on its 10-21 phone application "diverts millions of calls away from dispatch centers each year" by enabling officers to communicate with members of the public directly.[18] SPD does not provide data on the number of calls that might be diverted, but any such calls would no longer be subject to the systematic tracking and oversight which centralized dispatch systems provide. This arrangement makes it easier for individual officers to unilaterally control communications with members of the public and use that communication control to abuse their power.

h. **No Policies Restricting Use of Callyo's Additional Surveillance Features.** Callyo can be integrated with other law enforcement-focused Amazon Web Services technologies in ways that makes it surveillance capabilities more forceful.[19] Callyo also includes numerous additional surveillance features, such as video recording and live-streaming[20] and "10-

[15] SPD, "Callyo," 14-16.
[16] Ibid., 7 and 10.
[17] See "Supervisors and commanding officers are responsible for ensuring compliance with policies," at SPD, "Callyo," 9.
[18] "Spotlight: Callyo is Changing the Way Investigations Are Done," *Police 1*, March 12, 2019, https://www.police1.com/police-products/investigation/articles/spotlight-callyo-is-changing-the-way-investigations-are-done-JgZBKAlYMmn9y371/.
[19] AWS Public Sector Blog Team, "Harnessing the Power of the Cloud: Startups Deliver Innovative Services to Public Agencies Faster," *AWS Public Sector Blog,* Accessed June 16, 2021, https://aws.amazon.com/blogs/publicsector/harnessing-the-power-of-cloud-startups-deliver-innovative-services-to-public-safety-agencies-faster/.
[20] "Police Body Camera App," *10-21 Video.com*, Accessed June 16, 2021, https://10-21.com/; "10-21 Video," *Callyo.com.*

21 Flight," which allows officers to perform surveillance using drones.[21] The SIR describes no policy which would prevent SPD from using these Callyo features in the future. Videos captured by Callyo could be stored and later entered into facial recognition programs, which have been widely found to be racially biased.[22] Flight-based video tools can be and have been[23] used to track and observe protestors, improperly subjecting political organizers to targeted surveillance and chilling freedoms of speech and association.

III. *Outstanding Questions That Must be Addressed in the Final SIR*

- Is location data collected via Callyo? If so, how and when is location tracked and what policies govern recording and storage of location data?
- Can Callyo be used without a warrant, based on two-party consent alone? If so, when may it be used without a warrant, how is consent obtained, and what rules set the parameters for Callyo's use?
- When Callyo is used on calls between a third party (i.e. a cooperating witness) and an unknowing participant, how does the recording process differ compared to Callyo's use for recordings of officers in phone conversations?
- How and when is call masking used and what policies govern usage of that feature?
- How does the HRVU use Callyo and what guidelines govern its use? Does the HRVU ever use Callyo functions besides call masking, such as location tracking?
- Is any data collected through HRVU usage of Callyo – such as the phone numbers called – and how is that data stored and/or shared?
- Does SPD have a contract with Motorola Solutions for its use of Callyo? If so, what are the agreement's provisions?
- Where are audio recordings initially stored? Are they ever stored anywhere besides the original recording device and the thumb drive submitted to the investigating officer, such as on the Callyo cloud?
- Who owns the data collected by Callyo? Does Motorola have access to or store the collected data at any point? If so, what are Motorola's data security practices with respect to the data collected?
- How is data shared with third parties? How is shared data monitored for deletion within the appropriate time frame?

IV. *Recommendations for Regulation*

Pending answers to the questions above, we can make only preliminary recommendations for regulation of Callyo. SPD should adopt clearer and enforceable policies that ensure, at a minimum, the following:

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[21] "10-21 Flight," *Callyo.com*, Accessed June 7, 2021, https://callyo.com/public-safety/10-21-flight.
[22] Kade Crockford, "How is Face Recognition Surveillance Technology Racist?" *ACLU.org*, Accessed June 16, 2021, https://www.aclu.org/news/privacy-technology/how-is-face-recognition-surveillance-technology-racist/.
[23] "U.S. Watched George Floyd Protests in 15 Cities Using Aerial Surveillance," *The New York Times*, June 19, 2020, https://www.nytimes.com/2020/06/19/us/politics/george-floyd-protests-surveillance.html.

- There is a specific and restricted purpose of use. The ordinance should define clear limits on Callyo's uses, including narrow parameters for Callyo's consent-based uses.
- All data collected through Callyo must follow the issuance of a search warrant, or a clearly delineated consent process that sets enforceable rules limiting the types of data that may be collected.
- Data is securely shared with third parties and properly deleted.
- Any data collected by Motorola is not owned by, used by, or retained by Motorola, and any data housed on the Callyo cloud is properly secured.
- There must be clear accountability processes for ensuring TESU officers delete improperly recorded data that falls outside the scope of a search warrant or consent statement and do not share it with investigating officers.
- There must be clear guidelines for securely storing and managing any data collected by Callyo outside of call recordings, such as location data, and provisions to ensure the deletion of any such data collected that does not fall within the scope of a search warrant or consent agreement.

i2 iBase

I. *Background*

IBM i2 iBase is a database application that raises serious privacy and civil liberties concerns because it can operate as a surveillance dragnet and can perform automated social network analysis (SNA), which likely exacerbates disproportionate surveillance and policing of marginalized communities.

iBase is used by law enforcement to identify and analyze network connections and patterns within input data, conduct SNA or "link analysis," and share data with other agencies.[24] SPD uses i2 iBase in partnership with a second IBM application, i2 Analyst's Notebook,[25] which is "a visual analysis tool" that includes "connected network visualizations, social network analysis, and geospatial or temporal views to help… uncover hidden connections and patterns in data."[26] Together, these tools can search massive pools of data to find similarities and connections between entities and individuals, then produce maps and charts that represent the relationships or groups identified. The "Search 360" function in iBase allows officers to perform complex queries of stored records, expanding data search capabilities beyond those offered by existing records systems.[27]

iBase also allows for new ways of viewing data, and includes features not described in the SIR. It can generate heat maps and find "hidden connections" via the "Find

[24] "IBM Security i2 iBase: FAQs," *IBM.com*, Accessed June 10, 2021, https://www.ibm.com/products/i2-ibase.
[25] Seattle Police Department, "2021 Surveillance Impact Report: Link Analysis Software – IBM i2 iBase," Accessed June 9, 2021, https://www.seattle.gov/Documents/Departments/Tech/Privacy/Public%20Engagement%20SIR-%20Link%20Analysis-IBM%20i2%20iBase.pdf, 7.
[26] "IBM Security i2 Analyst's Notebook," *IBM.com*, Accessed June 10, 2021, https://www.ibm.com/products/i2-analysts-notebook.
[27] "IBM Security i2 iBase: Details," *IBM.com*, Accessed July 23, 2021, https://www.ibm.com/products/i2-ibase.

Connected Network" tool, which identifies a network that "directly or indirectly" connects several entities of interest.[28]

The SIR suggests that iBase is generally employed in two contexts. First, SPD's Real Time Crime Center (RTCC) uses iBase to rapidly provide information to officers responding to incidents.[29] The RTCC is a "centralized data and logistics hubs" that allows analysts to provide data to officers on the street.[30] Second, investigating officers use iBase to collect and organize timeline and relationship data for cases in progress.[31]

Although SPD describes using iBase only to assess RMS and CAD data, iBase can process larger data pools and operate as a data dragnet. For instance, the Durham, NC Police Department has considered importing city utility data, recreational park logs, and daily jail visitor lists into iBase.[32] A law enforcement-focused Open Source Intelligence integration is now available for iBase Analyst's notebook. The integration allows "customers to use not only the internal data available on the platform, but also to collect and analyze a wealth of further information through open sources." [33] This "further information" is public, but still raises privacy concerns when collected en masse and utilized for policing; for instance, the information could include social media data and geolocation history.[34] The SIR does not describe any SPD policy that would prevent additional data from being added to iBase. During the July 20th public engagement meeting, the SPD representative expressed uncertainty as to whether outside information was being used in SPD's iBase.

The data analysis and matching performed by SNA tools like iBase can often be inaccurate. Data may become outdated or be entered incorrectly or in different formats. [35] Such errors are difficult to catch when data is processed at this scale. The analysis process can perpetuate these inaccuracies by integrating errors into the visualizations produced and generating linkages between people who have no relationship. For instance, a one-letter typo in an address might lead someone to be inaccurately connected to a household miles away. An outdated address might generate a connection with a location or person someone has not visited for years. These inaccuracies can compound existing police bias; those who have previously interacted with the police – who are disproportionately Black, Latinx, and

[28] "IBM Security i2 Analyst's Notebook: Feature Spotlights," IBM.com, Accessed June 10, 2021, https://www.ibm.com/products/i2-analysts-notebook/details.
[29] SPD, "IBM i2 iBase," 5.
[30] Seattle Police Department Public Affairs, "SPD Announces Agile Policing Strategy, Unveils Real-Time Crime Center," *spdblotter.seattle.gov*, October 7, 2015, https://spdblotter.seattle.gov/2015/10/07/spd-announces-agile-policing-strategy-unveils-real-time-crime-center/.
[31] SPD, "i2 iBase," 5-6.
[32] "Digital Dragnet: How Data Became a Cop's Best Weapon," *GCN*, November 29, 2011, https://gcn.com/Articles/2011/12/05/Predictive-policing-tech-feature.aspx?Page=2.
[33] "Social Links Brings the OSINT Solution to IBM's i2 Analyst's Notebook Platform," *SocialLinks.io*, Accessed June 10, 2021, https://blog.sociallinks.io/https-blog-sociallinks-io-social-links-brings-the-osint-solution-to-ibms-i2-analysts-notebook-platform/.
[34] "SL Pro on IBM i2 Analyst's Notebook," *SocialLinks.io*, Accessed June 11, 2021, https://blog.sociallinks.io/sl-pro-on-ibm-i2-analysts-notebook-product-launch-and-practical-application/.
[35] Timothy Crocker, "The Power of Social Network Analysis," *Police Chief Magazine*, Accessed June 11, 2021, https://www.policechiefmagazine.org/power-social-network-analysis/.

Indigenous[36] – are more likely to have data in RMS or CAD that could lead to a false "linkage" to a person of interest and subject that person to surveillance and unwarranted interactions with police.

The SIR acknowledges that i2 iBase and the Analytics notebook are used as tools within the field of social network analysis (SNA).[37] SNA is a problematic mode of analysis, in part because it is often used for predictive policing via "heat-mapping." iBase advertises such features.[38] Any tool potentially useful for predictive policing raises well-documented civil liberties concerns, including reproducing existing biases and compounding the surveillance of neighborhoods which return higher crime data because they are over-policed.[39]

Utilizing relationship analysis in conjunction with other more common predictive policing tools also raises new threats. For instance, rather than identifying specific locations where gun violence is likely to occur, SNA predictive policing may aim to identify *specific individuals* likely to face gun violence[40] – an entirely new level of invasive surveillance and data targeting. The SIR does not describe predictive policing uses of iBase, but such uses are also not prohibited. Given RTCC's mission, it seems entirely conceivable that iBase data could be used to predict threats and re-direct officers. Unless governed by narrowly tailored guidelines, iBase has the potential to compound issues already present in SPD's existing predictive policing apparatus.

RTCC use of SNA technology also raises freedom of association concerns. Without proper regulation, SNA tools could be used with open source data to pull up details not only on the subject of the incident, but on all of their associations – for instance, criminal records for a brother, parent, or Facebook friend. That information may influence an officer's response to the situation; after all, RTCC

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[36] Factors including biased policing, discriminatory school discipline policies, and community over-policing mean that Latinx, Black, and Indigenous people are more likely to interact with police, be stopped by police, and be searched by police – leading to the creation of notes or an entry in a system like CAD or RMS. These differences are well-documented nationally and in Seattle. See, for instance, David Kroman, "Report Shows Seattle Policing Still Disparate Along Racial Lines," *Crosscut,* May 1, 2019, https://crosscut.com/2019/05/report-shows-seattle-police-enforcement-still-disparate-along-racial-lines; Elizabeth David, et al, "Contacts Between the Police and Public, 2015," *Bureau of Justice Statistics Special Report*, October 2018, "Findings," *Stanford Open Policing Project*, Accessed June 11, 2021, https://openpolicing.stanford.edu/findings/; Kim Eckart, "How a Police Contact by Middle School Leads to Different Outcomes for Black, White Youth," *Washington.edu*, December 3, 2020, https://www.washington.edu/news/2020/12/03/how-a-police-contact-by-middle-school-leads-to-different-outcomes-for-black-white-youth/; https://bjs.ojp.gov/content/pub/pdf/cpp15.pdf; Robert Crutchfield., et al, "Racial Disparity in Police Contacts," *Race Justice* 2, no.3 (July 1, 2012): 10, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3868476/;

[37] SPD "IBM i2 iBase," 6.

[38] "IBM Security i2 Analyst's Notebook: Feature Spotlights," *IBM.com*, Accessed June 10, 2021, https://www.ibm.com/products/i2-analysts-notebook/details; "Durham Police Department," *IBM.com*, Accessed July 23, 2021, https://www.ibm.com/case-studies/durham-police-department.

[39] Tim Lau, "Predictive Policing Explained," *The Brennan Center for Justice*, April 1, 2020, https://www.brennancenter.org/our-work/research-reports/predictive-policing-explained; Jared Friend, "Seattle's New Crime Analytics Program Threatens to Perpetuate Racism in Policing," *ACLU-WA.org*, October 20, 2015, https://www.aclu-wa.org/blog/seattle-s-new-crime-analytics-program-threatens-perpetuate-racism-policing.

[40] Andrew Papachristos and Michael Sierra-Arevalo, "Policing the Connected World," *Department of Justice: Community Oriented Policing Services*, 2018, https://www.hsdl.org/?view&did=814313; Reichart, et.al. "Focused Deterrence: A Policing Strategy to Combat Gun Violence," *ICJIA Research Hub*, Accessed July 23, 2021, https://icjia.illinois.gov/researchhub/articles/focused-deterrence-a-policing-strategy-to-combat-gun-violence.

pulls this data with the goal of informing officers' actions. Use of that data may prompt more aggressive policing on the basis of association alone, exacerbating existing biases in street policing. If additional data is imported into iBase, it is possible other kinds of associations and affiliations could also be identified and immediately sent to police, such as membership in Facebook groups or job history.

II. Concerns

a. **Bias and Inaccuracies in Computer-Automated Social Network Analysis.** As outlined above, iBase's automated relationship analyses are likely to generate data errors that compound existing biases. SPD does not indicate how often incorrect connections are identified, but they have confirmed that false connections do occur. To protect against these errors, the SIR indicates that relationship analysis will be "developed manually by analysts."[41] However, that claim conflicts with assertions that iBase's automated processing will "create[e] relevant intelligence from large amounts of data,"[42] and will create new "efficiencies" by avoiding manual data management.[43] Manual analysis also seems time-prohibitive in rapid-response scenarios. Even if SPD only analyzes relationships manually, the SIR never fully explains what safeguards are embedded into that manual analysis to ensure data is fully reviewed and erroneous connections deleted.

b. **Lack of Clarity on Purpose of Use and Usage Limits.** The SIR does not fully explain use cases for iBase and does not include policies placing limits on its uses.

   i. **Rapid Response Uses.** The SIR indicates that RTCC uses the social network analysis provided by iBase to provide "actionable information"[44] to officers in the field but does not thoroughly explain how that information is used by offices or why it is helpful. It is therefore difficult to assess the full extent of civil liberties concerns presented by the in-the-field uses of the technology and to assess SPD's need for the technology.

   ii. **Need for a Criminal Investigation.** The SIR does not specify at what point someone's data is consolidated and viewed in iBase. Based on the contemplated RTCC uses of the technology, it seems that a formal criminal investigation does not need to be opened before data can be pulled and visualized in iBase. Rather, anyone who is merely the subject of a 911 call might be analyzed using iBase.

   iii. **Visualization vs. Predictive Policing.** Without clearer usage limits, data compiled via iBase might be used for predictive policing.

[41] SPD, "IBM i2 iBase," 27.
[42] Ibid., 7.
[43] Ibid., 6, 21, and 27.
[44] Ibid., 10.

c. **Lack of Clarify Around Types of Data Stored and Processed.** In the SIR, SPD does not specify what portion of existing data is automatically imported into iBase, and what kinds of data have been manually inputted.[45] The lack of information on data currently included or potentially included in iBase raises numerous concerns.

   i. **Lack of Limits on Data Imported.** The SIR indicates that additional data can be "manually imported" into the system[46] and suggests that officers would manually input only single "piece[s] of data."[47] However, it does not specify a policy limiting the kinds of data that can be manually inputted or that would prevent automatic import of outside data. The lack of such restrictions is concerning given iBase's potential to operate as a dragnet with a disparate surveillance impact.

   ii. **Biased Data Selection.** Biases likely already exist in the data imported from RMS and CAD. Members of over-policed communities are far more likely to appear in SPD systems and are therefore more likely to appear in iBase relationships analyses and be subjected to police investigation resulting from false linkages. The SIR also states that only some portions of RMS and CAD data are automatically imported into iBase. If so, the data selection parameters used could introduce additional bias. For instance, importing data only for certain types of incidents or from certain locations could compound the racial and economic disparities already present in the data. The SIR does not indicate whether SPD has completed a disparate impact assessment of the linkages iBase generates, nor whether any policies exist which might mitigate this disparate impact. When asked what portion of data is imported into iBase, the SPD representative implied that only difficult to import data was excluded, but the inclusion parameters were not fully described.

d. **Lack of Clarity Regarding Contract with IBM.** The SIR does not indicate whether SPD has a contract with IBM and does not describe the provisions of any such contract. It is therefore difficult to assess what future uses of iBase might be possible, what kinds of data might be imported, and what data security mechanisms are in place. Although the SIR states that data is maintained on SPD servers and is entered into iBase via a one-way server transfer, the SIR does not describe enforceable provisions which could prevent future IBM use or review of data and analyses from iBase.

e. **Lack of Clarity on Data Security.** The SIR does not fully describe data security measures that would prevent third-party access to sensitive iBase relationship analyses and searches.

[45] Ibid., 7.
[46] Ibid.
[47] Ibid., 6.

i. **Data Deletion.** The SIR states that manually entered data will be automatically deleted after five years.[48] It is not clear why there is a lengthy five-year retention period. The SIR also does not specify what systems or oversight mechanisms are in place to ensure that data is deleted. This is particularly concerning given the lack of limits on manual data inputs, as outlined above.

ii. **Incidental Data Access.** The SIR specifies, "incidental data access may occur through delivery of technology client services."[49] However, it does not describe the specific scenarios in which this data access might occur, nor what kind of data would be viewed, leaving open the possibility that significant elements of analysis generated by iBase could be released to third-party entities.

III. *Outstanding Questions that Must be Addressed in the Final SIR*

- Which "portion" of SPD RMS and CAD data is automatically imported into iBase? How often does the data used generate erroneous relationship linkages?
- Has an equity assessment been performed on the portion of the data transferred? What biases exist in the data, and how does SPD ensure that the biases present in the social network analyses conducted with this software do not cause disparate impact?
- Are there any limits on the kinds of data that can be manually inputted into the system? Has there been an evaluation of what kinds of data have been manually inputted thus far?
- Are there any policies that would prevent other kinds of data from being imported into iBase in the future?
- How is manual relationship analysis performed using iBase, and what specific safeguards exist within the analysis process to prevent erroneous connections? Does SPD ever use the automatically-generated relationship maps created by iBase or Analyst's notebook, without verifying the accuracy of all the many data points involved?
- Is data compiled via iBase ever used for predictive purposes, rather than mere visualization? Are there any policies that would prevent its use for predictive purposes in the future?
- How does RTCC use the social network analysis provided by iBase to provide "actionable information"[50] to officers in the field? What kinds of actionable information would this include, and why would such data be necessary or helpful?
- At what point can someone's data be consolidated and viewed in iBase?
- What systems ensure that manually entered data is deleted automatically?
- What circumstances might lead to "incidental" data access, and what data would be viewed? Could only ITD employees potentially obtain "incidental data access?"
- Does SPD have a contract with IBM, and if so, what are its provisions?

[48] Ibid., 10.
[49] Ibid., 11.
[50] Ibid., 10.

IV. *Suggestions for Regulation*

Pending answers to the to the questions above, we can make only preliminary recommendations for regulation of IBM's i2 iBase and Analyst's Notebook. SPD should adopt clearer and enforceable policies that include, at a minimum, the following:

- A regular audit to assess for biases in the data imported into iBase and in the analyses generated by iBase.
- Limits on the kinds of data that may be inputted both manually and automatically into iBase, ensuring that additional pools of public or private information are not added in the future.
- A shortened data retention period that does not exceed the time necessary to conduct a criminal investigation.
- A clear deletion oversight process to ensure that manually added data is deleted after the specified retention period.
- A manual relationships analysis process that includes clear checkpoints designed to ensure erroneous data and inaccurate linkages generated by iBase are detected and corrected before they are actively investigated.
- Limits on the usage of potentially erroneous iBase analyses and search data in rapid-response settings where manual analysis is not possible.
- Clear purpose of use limits, restricting when someone's relationship network may be assembled in iBase, such as a requirement that a criminal investigation be opened before such an analysis is begun, to prevent the widespread use of iBase analysis on all individuals encountering the police.
- A regulation banning the use of iBase for predictive policing.
- A contract with IBM that ensures IBM never possesses, uses, or accesses SPD data.

Audio Recording Systems

I. *Background*

"Wires" are concealed audio recording devices, generally used to record in-person conversations pursuant to a search warrant. This type of technology poses serious privacy and civil liberties concerns. If people do not have the knowledge and assurance that private communications are, indeed, private, habits based upon fear and insecurity will gradually replace habits of freedom, chilling people's civil rights and liberties.

"Audio recording systems" include devices hidden on a person, in an object, or in a location and used to record audio, following consent or search warrant authorization.[51] The SIR does not specify the particular audio recording technology

[51] Seattle Police Department, "2021 Surveillance Impact Report: Audio Recording Systems ('Wires')," accessed June 4, 2021, https://www.seattle.gov/Documents/Departments/Tech/Privacy/Public%20Engagement%20SIR%20-%20Audio%20Recording%20Systems.pdf, 4.

used by the department, outside of the Callyo call recording technology discussed above. At the June 10th public engagement meeting, an SPD representative indicated that some technologies that fall under this SIR may be able to record video, though the SIR states video devices are described in a separate SIR.[52] Although the SIR is unclear about the type or model of devices used, at the July 20th public engagement meeting, SPD representatives suggested that the devices used were mostly relatively new devices – not legacy "wires" or tape recorders – and were typically small, handheld recorders or officers' cell phones.

Many new audio wire technologies are substantially similar in function to traditional recording devices but may be far smaller and have improved audio quality and storage capacity, making them easier to conceal and surveillance easier to perform. Improved audio filtering and increased wearer comfort mean devices can be used in a wider array of settings irrespective of noise, can pick up sound from much further away, and can be worn for longer periods of time. Transmissions from planted devices can also be streamed to remote computers so that law enforcement need not be near the conversation recorded.[53] Modern devices are therefore capable of widespread and complex surveillance not contemplable even 15 years ago. Increased storage capacity and ease of data deletion also make device misuse more likely; officers can now leave a device running in a public place where third-party conversations can be captured, then try to later delete excess data improperly collected.

Improved audio quality and increasingly sophisticated audio-processing software also pose new threats. Law enforcement agencies already employ software that can identify and match voices, and voice databases are being developed.[54] The use of this software, in conjunction with mass police storage of high-quality audio recordings, poses a risk of easy but possibly inaccurate or biased government identification and surveillance of those recorded. SPD acknowledges that audio recordings may be shared with other agencies, including other law enforcement departments.[55] As such, even if SPD would need to undergo a review process before acquiring voice recognition technologies, the voices of those recorded by SPD could easily become part of other agencies' voice recording databases. SPD audio recordings could therefore become a permanent biometric record, much like a fingerprint. Given these new and developing risks, it is necessary to set narrower limits on uses of audio-processing software, sharing of audio data, and uses of recorders.

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[52] Ibid., 6.
[53] Wendy Ruderman, "Is Someone Recording This? It's Harder to Find Out," *The New York Times*, April 7, 2013, https://www.nytimes.com/2013/04/08/nyregion/secret-recording-grows-safer-as-the-wire-grows-tinier.html; Laurie Mason Schroeder, "'Wearing a Wire' in the Digital Age: Smaller, Safer, More Comfortable," *The Morning Call*, February 3, 2018, https://www.mcall.com/news/police/mc-nws-allentown-city-hall-investigation-wiretaps-20180201-story.html.
[54] Michael Dumiak, "Interpol's New Software Will Recognize Criminals by Their Voices," *Spectrum.IEEE.org*, May 16, 2018, https://spectrum.ieee.org/tech-talk/consumer-electronics/audiovideo/interpols-new-automated-platform-will-recognize-criminals-by-their-voice; "Speaker Identification" *GoVivace.com*, Accessed June 10, 2021, https://www.govivace.com/products/speaker-identification/; "Voice Authentication," *Aware Biometrics*, Accessed June 10, 2021, https://www.aware.com/voice-authentication/; 'Forensic Voice Analysis," *Sestek.com*, Accessed June 10, 2021, https://www.sestek.com/forensic-voice-analysis/; "Voice Inspector for Forensic Experts," *Phonexia.com*, Accessed June 10, 2021, https://www.phonexia.com/en/use-case/audio-forensics-software/.
[55] SPD, "Audio Recording Systems ('Wires')," 12.

II. *Specific Concerns*

a. **Lack of Clarity Around How Devices Are Used.** The SIR does not specify the scenarios in which officers may use recording devices, saying that "[SPD] utilizes audio recording systems in a handful of ways to obtain information during a criminal investigation."[56] It is difficult to assess the necessity of audio recordings without clarity as to how devices are used and where they may be used. Although audio recordings are helpful in some scenarios, some audio recordings – particularly those authorized only by two-party consent – may be unjustified given the privacy concerns posed by audio recording. SPD never describes how frequently audio is recorded or how often improper recordings are captured, making it difficult to assess the current process's flaws.

b. **Lack of Clarity Around Warrant and Consent Procedures.** The SIR indicates that either a warrant or consent may authorize use of a recording device.[57] However, neither the SIR nor the June 10th or July 20th public engagement meetings provided a thorough description of the consent process. It is unclear whether SPD has a clear consent script or guidelines for determining what recordings are permissible. It is important that individuals know precisely what they are consenting to and how they can opt out of being recorded. Without clear processes, SPD may be capturing and retaining audio that falls neither clearly within the terms of the party's consent nor outside of them. Retaining any such audio undermines the privacy expectations embodied in Washington's two-party consent laws. Additionally, without clear guidelines, decisions about which recordings to keep are likely to be made arbitrarily or in ways informed by bias.

c. **Lack of Adequate Safeguards Against Improper Data Collection Prevention.** The SIR specifies data deletion practices that prevent improperly collected data from being retained, pursuant to the terms of a warrant or the terms of a party's consent. However, it does not outline formal usage guidelines that would prevent improper recordings from ever being collected. The additional storage capacity and audio sensitivity of today's recording make it far more likely that an officer might turn on a device early or leave it on too long and capture third-party conversations before and after any conversation of interest. Even carefully timed recordings might capture private background conversations. Although such data might eventually be deleted, those conversations will be temporarily stored, then reviewed by a member of SPD staff. The capture, review, and temporary storage of recordings of citizens who have not consented and are not subject to a warrant constitutes a serious privacy violation, particularly given the highly personal, identifiable information which might be collected.

[56] Ibid., 4.
[57] Ibid.

d. **Lack of Clarity on Types of Devices Used.** The SIR does not specify the manufacturer or function of devices used.[58] This is particularly concerning given that officers are using their phones to record, which may involve the use of a third-party application or software.

e. **Lack of Clarity on Specific Data Extraction Software.** The SIR states that completed recordings are "…extracted onto a thumb drive from the device using a locally stored computer application…. This application… is used solely to extract audio data from a device and stores no data."[59] The type of application and its features are never detailed. As such, we cannot analyze the security of the software. Presumably some second software is also used to delete parts of recordings that are improperly collected. That software and its features are also not specified.

f. **Inconsistencies in Deletion Policies.** The SIR states that the TESU officer is responsible for purging improperly collected data,[60] but also that the investigating officer is responsible for the purge.[61] If no one person is accountable for data deletion, some improperly collected data may never be purged. Additionally, if the investigating officer can complete the deletion, they necessarily may access and review improperly collected recordings. The review, use or retention of such unauthorized recordings constitutes a clear violation of 4th amendment rights and Washington consent laws.

g. **Security Risks Associated with Third Party Data Sharing.** The SIR describes third-party data sharing only vaguely.[62] It does not describe the sharing process, nor how data security will be maintained. The lack of data security measures increases the likelihood that third parties will improperly expose, retain, or share private data. It is also unclear whether audio recordings shared with partner law enforcement agencies or other jurisdictions – who are not subject to the same surveillance regulations – are shared permanently, or whether any protocols are in place to ensure that shared data is later deleted.

h. **Inconsistencies in Audio Device Request and Management Process.** The SIR is inconsistent in describing how TESU officers process requests for audio device usage. The SIR in one place states that the investigating officer completes the audio device request form[63] but elsewhere states that TESU does so.[64] The request form is designed to ensure that officers obtain consent or a warrant before a device is issued. Therefore, an unclear request process increases the probability of unauthorized device use and improper private data collection.

[58] Ibid., 5 and 16.
[59] Ibid., 8.
[60] Ibid., 6.
[61] Ibid., 11.
[62] Ibid., 12.
[63] Ibid., 10.
[64] Ibid., 7.

III. *Outstanding Questions That Must be Addressed in the Final SIR*

- What is the manufacture and functionality of audio recording devices utilized by SPD? How much storage do they have, from what distance can they transmit, and from what distance can they pick up sound?
- How are new technologies selected when replacing devices that have reached end of life? Are there any limits on the kinds of new recording devices that can be acquired? Do new technologies include features not present in older technologies?
- What application is used to extract data from the recording devices and place the audio onto a hard drive or thumb drive? Can this software or any other alter recordings? If so, how is use of the software logged?
- Are there guidelines limiting the settings in which an audio device can be used or preventing the collection of unneeded and improper recordings?
- Are there any guidelines limiting how the audio devices can be used – for instance specifying at what point the recording may be turned on and when it must be turned off?
- What is the device request process? Who fills out the request form?
- What is the process for purging data? Who purges the data, and what oversight measures are in place to ensure data is properly and fully purged?
- What protocols ensure that consent is properly and clearly obtained before a recording is initiated?
- Where there is no warrant, how do officers decide which recordings or portions of recordings to delete and which to retain? Are there guidelines for making this determination?
- How is data shared with third parties? What security practices are observed? How is shared data monitored for deletion within the appropriate time frame?

IV. *Recommendations for Regulation*

Pending answers to the to the questions above, we can make only preliminary recommendations for regulation of audio/wire technology, particularly given that both the kind of technology and the scenarios where it is used are not described. SPD should adopt clearer and enforceable policies that include, at a minimum, the following:

- Narrowly tailored guidelines for where, how, and when recording devices may be used that help to limit the collection of unauthorized data. This might include a requirement that recording devices be turned on only once a person of interest is present, or a prohibition on using particularly powerful devices in public places where other private conversations might easily be picked up.
- Clear rules for the issuance of recording devices and processing of all recordings that limit the role of the investigating officer and ensure oversight by a supervisor. These rules should include a data-deletion protocol which makes clear who is responsible for deleting improperly collected data, ensures regular oversight of deletion, and provides clarity as to what data must be deleted where no warrant is used.

- Limits on the kinds of audio recording technology which SPD can use as end-of-life replacements for current audio devices, with consideration for the risks posed by newer and more powerful recording devices and applications.
- Limits on the software that can be used to process and extract audio recordings. For instance, this might include a prohibition on software that involves offsite cloud storage or voice biometrics recognition.
- Clear procedures for securely sharing data with third parties, including a policy that ensures shared data is erased.

Maltego

I. *Background*

Maltego is a powerful technology used by law enforcement to search, collect, and analyze billions of open-source data points and generate charts representing connections between identified entities and individuals. This technology poses serious privacy and civil liberties concerns as it enables dragnet surveillance through mass social media monitoring.

Maltego is advertised to law enforcement and cybersecurity analysts as a tool for acquiring identifying information on individuals and entities under investigation, including through analysis of email addresses and social media data, or data from the "dark web."[65] There are multiple versions of Maltego that include different functions and data packages.[66] SPD states that they use the free, community version to asses information which is already publicly available online, primarily in the course of cybercrime investigations.[67]

Maltego advertises having more than 35 data partners.[68] Their partners include Social Links,[69] a platform which allows for the harvesting of data from more than 50 social networks including Facebook, Instagram, and YouTube.[70] Even the free version of Maltego can be used to accesses these additional data integrations. For instance, Social Links has a free plug-in, Social Links CE, which can retrieve information from Skype and Social Links' own database,[71] which includes 7 billion

[65] "Law Enforcement," *Maltego.com*, Accessed June 15, 2021, https://www.maltego.com/law-enforcement/.
[66] "Pricing," *Maltego.com*, Accessed June 15, 2021, https://www.maltego.com/pricing-plans/; "Products," *Maltego.com*, Accessed June 15, 2021, https://www.maltego.com/products/.
[67] Seattle Police Department, 2021 Surveillance Impact Report: Link Analysis Software - Maltego," Accessed June 4, 2021, https://www.seattle.gov/Documents/Departments/Tech/Privacy/Public%20Engagement%20SIR-%20Link%20Analysis-Maltego.pdf, 5 and 11.
[68] "The Five Pillars of the Maltego Officer," *Maltego.com*, Accessed June 4, 2021, https://www.maltego.com/blog/the-five-pillars-of-the-maltego-offering/.
[69] "Transform Hub," *Maltego.com*, Accessed June 15, 2021, https://www.maltego.com/transform-hub/.
[70] "Social Links Pro," *Maltego.com*, Accessed June 15, 2021, https://www.maltego.com/transform-hub/social-links-pro; "Police Tight Lipped on Trial of Social Media Surveillance Tools," *NewsHub*, June 14, 2021, https://www.newshub.co.nz/home/new-zealand/2021/06/police-tight-lipped-on-trial-of-social-media-surveillance-tools.html.
[71] "Social Links CE," *Maltego.com*, Accessed June 15, 2021, https://www.maltego.com/transform-hub/social-links-ce/.

pieces of data.[72] Similarly, the free Wayback Machine integration allows users to browse "hundreds of billions of websites, going back for years or even decades…" including historical snapshots of pages and data long-since deleted.[73] Although the SIR identifies some types of data that SPD does collect, such as web domain ownership information,[74] it does not fully explicate what kinds of data SPD uses within Maltego.

The validity of data collected via Maltego is questionable, given the multiple source points and huge quantities of data analyzed. Although the SIR indicates that all SPD data collected via Maltego is already publicly available,[75] that guarantee is misleading. Publicly available information can include private or sensitive data improperly made public via data breaches or hacking. Indeed, law enforcement agencies are known to purchase and use such "public" hacked data.[76] Notably, Maltego includes a free integration from "Have I Been Pwned," which may be used to search for such "public" hacked data.[77] Without proper analysis and verification, outputs generated from Maltego's open source data could further expose sensitive information.

Monitoring even accurate and properly collected public data raises serious civil liberties concerns when performed at the scale promised by Maltego. Vast pools of public data, when stored and analyzed in combination, can uncover privately held information. For instance, at a public demonstration in 2012, Maltego's founder demonstrated that his software could uncover the identity of a likely NSA employee using "public" information flowing out of the agency's parking lot. Maltego identified the employee's email address, date of birth, travel history, employment and education history, and image.[78] Such invasive surveillance fundamentally impedes individual privacy rights, particularly when entrusted to a government agency and used without clear limitations.

Maltego also may be used for mass monitoring of social media. Law enforcement social media monitoring is not new; by 2016, 70% of more than 500 surveyed departments used social media for intelligence gathering.[79] Tools like Maltego, however, allow for mass analysis and complex searches of social media data, a far more potent form of surveillance than targeted investigations of specific accounts. These tools can enhance agencies' existing social media agendas, including

[72] Jorn Weber, "Social Links: The All-Round Tools for OSINT Intern Investigations – Part 2," *Corma*, August 13, 2020, https://corma.de/en/4-social-links-the-all-round-tool-for-osint-internet-investigations-part-2/.
[73] "Wayback Machine," *Maltego.com*, Accessed June 15, 2021, https://www.maltego.com/transform-hub/wayback-machine/.
[74] SPD, "Maltego," 6.
[75] Ibid., 5.
[76] Joseph Cox, "Police are Buying Access to Hacked Website Data," *Vice.com*, July 8, 2020, https://www.vice.com/en/article/3azvey/police-buying-hacked-data-spycloud; The Department of Justice, "Criminal Charges Filed in Los Angeles and Alaska in Connection with Seizures of 15 Websites Offering DDoS-For-Hire Services," December 20, 2018, https://www.justice.gov/usao-cdca/pr/criminal-charges-filed-los-angeles-and-alaska-conjunction-seizures-15-websites-offering.
[77] "Have I Been Pwned," *Maltego.com*, Accessed June 15, 2021, https://www.maltego.com/transform-hub/haveiben-pwned/.
[78] Jeremy Kirk, "Who Is Tweeting from the NSA's Parking Lot," *Computer World*, October 17, 2012, https://www.computerworld.com/article/2492504/who-is-tweeting-from-the-nsa-s-parking-lot-.html.
[79] KiDeuk Kim, et. al., "2016 Law Enforcement Use of Social Media Survey," *The Urban Institute and International Association of Chiefs of Police*, February 2017, https://www.urban.org/sites/default/files/publication/88661/2016-law-enforcement-use-of-social-media-survey_5.pdf.

monitoring of demonstrations and activists,[80] with tracking often particularly focused on Black Lives Matter organizers.[81] Such tracking chills political speech and raises safety and privacy concerns, extending decades of police surveillance and abuse of civil rights protestors.[82] Social media analysis has also been used as a form of predictive policing – a mode of policing rife with bias and inaccuracies[83] – as police surveil accounts of interest and analyze posts to anticipate future crimes.[84]

Law enforcement already misuses and misconstrues social media data to compound existing biases and feed mass incarceration. The NYPD, for instance, has a social media tracking unit devoted to monitoring youth "gangs." Data is provided to probation and parole officers and can be presented in court with devastating consequences; in one case, misinterpreted social media "likes" were used to deny pre-trial bail to a misidentified, innocent Black teenager who spent two years awaiting trial on Rikers Island.[85] Maltego's mass analysis of public data grants police expanded surveillance capabilities and can subject individuals to unwarranted police interaction or criminal consequences on the basis of inaccurate, hacked, or misinterpreted information.

II. *Concerns*

a. **Inadequate Policies Defining Purpose of Use**. The SIR suggests that Maltego is primarily used for cybercrime investigations,[86] but does not specify any policies designating when the technology may be used. The SIR's language is also vague and implies that Maltego has been used in non-cyber contexts.[87] During the July 20th public engagement meeting, the SPD representative also commented that Maltego could be used for non-cyber crimes, although it generally is not. It is therefore unclear how widely large-scale public data analysis is currently used in SPD criminal investigations or what would prevent widespread usage of Maltego in the future.

b. **Inadequate Policies on Data Collection and Assessment.** The SIR states that Maltego can only be used within the bounds of a specific criminal investigation or "cybersecurity incidents."[88] However, it does not specify any internal guidelines restricting what public data or whose public data may be collected and analyzed using Maltego. Under existing policies, it seems entirely possible that people tenuously or erroneously associated with potential perpetrators – including people for whom there is little or no

[80] Rachel Levinson-Waldman, "Government Access to and Manipulation of Social Media: Legal and Police Challenges," *Howard Law Journal* (61.3, 2018), https://www.brennancenter.org/sites/default/files/publications/images/RLW_HowardLJ_Article.pdf, 529.
[81] "Police Monitoring of Social Media Sparks Concerns in Black and Brown Communities," *NPR – All Things Considered*, August 21, 2020, https://www.npr.org/2020/08/21/904646038/police-monitoring-of-social-media-sparks-concerns-in-black-and-brown-communities.
[82] Rachel Levinson-Waldman and Angel Diaz, "How to Reform Police Monitoring of Social Media," *Brookings Institute – Tech Stream*, July 9, 2020, https://www.brookings.edu/techstream/how-to-reform-police-monitoring-of-social-media/; Levinson-Waldman, "Government Access," 524-525.
[83] Lau, "Predictive Policing Explained;" Friend, "Seattle's New Crime Analytics Program."
[84] Levinson-Waldman, "Government Access," 530.
[85] Ibid., 528.
[86] SPD, "Maltego," 5.
[87] Ibid., 8 and 10.
[88] Ibid., 8.

evidence of criminal activity – could be subject to Maltego assessment and surveillance.

c. **Lack of Clarity Around Data Sources.** The SIR does not describe the specific data sources SPD utilizes via Maltego; it provides only limited examples of Maltego's usage and states that data is collected from "various open source websites."[89] Absent further clarity, it seems possible that SPD can use Maltego for social media data analysis, raising privacy issues not addressed in the SIR. Additionally, the SIR acknowledges that "some iterations of Maltego allows for collection of private data of citizens,"[90] but does not outline procedures to prevent accidental private data collection, including of private information improperly made public through hacking.

d. **Potential for Predictive Usages.** Paterva advertises that Maltego can "[h]elp solve future investigations by pushing insights back into [a] case management system."[91] The SIR indicates that SPD exports Maltego charts back into SPD's system[92] and suggests that data from Maltego might be used for "defensive" purposes.[93] If Maltego is being used to anticipate future crimes, SPD must provide clarity as to a) how they guard against existing biases often replicated by predictive policing, and b) what surveillance they perform based on these predictions.

e. **Inadequate Policies to Assess for Errors in Data Analysis.** The SIR acknowledges that erroneous linkages are one of the "most important unintended possible consequence[s]" of Maltego. However, in describing safeguards to prevent erroneous linkages, the SIR only states, "because all analysis [is] conducted in the TESU by a limited number of detectives the risk is mitigated."[94] This mechanism seems ineffective, as no data output review process is described. Perhaps the SIR means that TESU detectives perform only limited and reviewable amounts of manual analysis and diagramming, which indeed might limit inaccuracies. However, no policies are described which would enforce limits on diagramming techniques and levels of usage. To the contrary, any such limits contradict the core purpose of Maltego. SPD states that Maltego is useful precisely because it can "pars[e] large amounts of… information,"[95] and thereby "help in identifying unknown relationship[s]."[96]

   The SIR does not describe SPD tracking of Maltego's error rate. Without error tracking or safeguards, Maltego outputs likely lead police in inaccurate directions and subject random individuals to unnecessary surveillance and police interaction. Because evidence collected via Maltego can be used for search warrants, inaccurate Maltego outputs that are presented to the court as valid could lead to particularly invasive forms of improper searches.[97]

[89] Ibid., 6.
[90] SPD, "Maltego," 20.
[91] Law Enforcement," *Maltego.com.*
[92] SPD, "Maltego," 9.
[93] Ibid., 6.
[94] Ibid., 6 and 14.
[95] Ibid., 6.
[96] Ibid.
[97] Ibid.

f. **Lack of Clarity on Data Retention Policies.** The SIR states that data that is not relevant to an investigation is not retained and that "pertinent" data is exported to a spreadsheet or diagram and then handled per department policy.[98] However, it does not make clear how and when the originally collected, pertinent data is deleted from Maltego, leaving open the possibility that such data is retained indefinitely.

g. **Lack of Clarity Around Relationship with Paterva.** The SIR states that SPD searches are stored by the vendor, as SPD is unable to stand up their own server using the free version of the software.[99] These searches contain sensitive information that indicates the contents and direction of a criminal investigation and are being exposed to a private third-party. Additionally, the SIR states that Maltego is not "used to process or collect internal data,"[100] but elsewhere says that private information gathered via search warrant can be input into Maltego.[101] The SIR does not describe measures to keep that private data secure nor outlines Paterva's or Maltego Technolgies's internal data security measures. The SIR also does not describe a contract between SPD and Paterva or Maltego Technologies for the use of the free Maltego software.

h. **Potential for Improper Use Without Auditing/Logging.** The free version of Maltego's software seems to include no auditing or logging capabilities.[102] Lack of auditing or logging increases the probability that the software will be misused. Given the software's potential for invasive surveillance and monitoring that could intrude upon protected speech, more careful monitoring is essential. Notably, upgrading to the paid version of the software would not resolve the problem and would likely exacerbate the overall civil liberties concerns posed by the software; the paid version includes additional privacy risks given the far wider breadth of data available.

III. *Outstanding Questions that Must be Addressed in the Final SIR*

- When can Maltego be used for non-cyber investigations?
- Once an investigation is opened, are there any internal guidelines restricting what public data or whose public data may be collected and analyzed using Maltego?
- Which specific data sources does SPD analyze using Maltego? Are there any limits on the kinds of data that can be assessed?
- Are Maltego outputs ever used for any predictive or "defensive" policing?
- Are errors in the data Maltego pulls systematically tracked? Are there any safeguards against errors or processes for analyzing the data?
- How often has Maltego been used, and is there any data suggestive of its efficacy in resolving cybersecurity crimes?

[98] Ibid., 9.
[99] Ibid, 10.
[100] Ibid., 9.
[101] Ibid., 6.
[102] Ibid., 11.

- After data is exported, how and when is pertinent data deleted from within Maltego?
- Does SPD have any kind of written agreement or contract with Paterva/Maltego Technologies for the use of the free Maltego software? If so, what are the provisions?
- Does SPD enter private information collected via search warrant into Maltego? If so, what data security protocols are in place to protect that private information?
- Does Paterva/Maltego Technologies have access to and store data that is requested and collected by SPD, beyond requests/searches made?
- What are the vendor's policies for data security, how is data stored, and who owns the data collected and analyses generated?

IV. *Recommendations for Regulation*

Pending answers to the to the questions above, we can make only preliminary recommendations for regulation of Maltego. SPD should adopt clearer and enforceable policies that include, at a minimum, the following:

- Guidelines as to when Maltego may be used, such as a regulation that permits its use only for cybercrime investigations.
- Limits on who associated with an investigation may have their data collected using Maltego, such as a regulation requiring reasonable suspicion that an individual committed a crime before their public data can be amassed and assessed.
- Limits on the kinds of public data that may be assessed using Maltego, such as a prohibition on dragnet social media analysis.
- A regulation that prevents internal SPD data from being inputted into Maltego.
- A prohibition on use of Maltego for predictive policing.
- An analysis of the impacts of any Maltego outputs.
- A process to analyze the accuracy of data and analyses generated by Maltego.
- The deletion of originally collected, pertinent data from within Maltego after it is exported.
- A clear agreement with the vendor for the use of the free Maltego software that prohibits the vendor from storing or accessing SPD data.
- The creation of additional security measures to prevent improper access of Maltego by unauthorized officers, given the lack of auditing and logging capabilities.

Sincerely,

Jennifer Lee
Technology and Liberty Project Manager

Farris Peale
Policy and Advocacy Group Intern

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June 8, 2021

Re: Surveillance Ordinance Group 4a Request for Clarification from CTAB Privacy & Cybersecurity

The Community Technology Advisory Board (CTAB) Privacy & Cybersecurity Committee appreciates the opportunity to provide comment on the Group 4a Surveillance Impact Reports (SIRs). Volunteers from this committee have reviewed the Surveillance Impact Reports for the Group 4a technologies as a group. Our comment with requests for clarification is attached.

Our expectations for the onboarding of new technologies and the use of current technologies extend those as communicated in our 12 March 2019 memo to the Seattle City Council regarding Group 2 technologies with additions:

- Implicit bias has a material and potentially destructive impact on individuals and communities. It is important to keep in mind the ways in which bias can be streamlined and exacerbated through the use of technology.
- Interdepartmental sharing of privacy best practices: When we share what we've learned with each other, the overall health of the privacy ecosystem goes up.
- Regular external security audits: Coordinated by ITD (Seattle IT), routine third-party security audits are invaluable for both hosted-service vendors and on-premises systems.
- Mergers and acquisitions: These large, sometimes billion-dollar ownership changes introduce uncertainty. Any time a vendor, especially one with a hosted service, changes ownership, a thorough review of any privacy policy or contractual changes should be reviewed.
- Remaining a Welcoming City: As part of the Welcoming Cities Resolution, no department should comply with a request for information from Immigration and Customs Enforcement (ICE) without a criminal warrant. In addition, the privacy of all citizens should be protected equally and without consideration of their immigration status.

Sincerely,

CTAB Privacy and Cybersecurity subcommittee members

Nicole Espy, Committee co-chair
Camille Malonzo, Committee co-chair
Eryk Waligora, Committee volunteer

Community Technology Advisory Board

Femi Adebayo, CTAB Member
Nicole Espy, CTAB Member
Dr. Tyrone Grandison, CTAB Member
David Kirichenko, CTAB Member
John Krull, CTAB Member
Brandon Lindsey, CTAB Member
Lassana Magassa, CTAB Member
Camille Malonzo, CTAB Vice-Chair
René Peters, CTAB Chair
Leah Shin, CTAB Member

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Callyo (Police)

1. Data from this application is stored on Amazon Web Services[1]. Will any SPD generated date be stored by Callyo or AWS?
2. Do other Callyo users or Callyo engineers have access to data generated by SPD?
3. How is data generated by SDP protected from Callyo or AWS?
4. Callyo was recently acquired by Motorola Systems in August 2020. Are there any changes to the terms of use as a result of the acquisition? If any data is collected by the technology provider, has its use / handling changed since acquisition?
5. Callyo is an Amazon Web Services (AWS) partner, which is a cloud services provider. Will any future usage of AWS via Callyo or any changes as a result of the acquisition by Motorol be reviewed by City Council prior to onboarding?
6. The SIR states that "Callyo is utilized in two different ways by units within SPD: Technical and Electronic Support Unit (TESU) and the High Risk Victims Unit (HRVU). The High Risk Victims Unit uses Callyo to mask phone numbers but does not utilize the recording features of Callyo" and goes on to describe the use of the technology by TESU officers/detectives. What is the data that HRVU keep about the call, if any, and for how long? Is that metadata used for any other purposes? Is that shared with any other department either internal to SPD or externally?
7. The SIR states "TESU maintains logs of requests (including copies of request forms and warrants) and extractions that are available for audit. SPD's Audit, Policy and Research Section (APRS) can conduct an audit of any system at any time. The Office of Inspector General and the federal monitor can also access all data and audit for compliance at any time." How often do these audits occur?
8. Recordings are retained for a maximum of a year ("Per the Washington Secretary of State's Law Enforcement Records Retention Schedule, investigational conversation recordings are retained "for 1 year after transcribed verbatim and verified OR until disposition of pertinent case file, whichever is sooner, then Destroy" (LE06-01-04 Rev. 1). TESU maintains a log of requests (including copies of warrants), extractions, and deployments that are available to any auditor, including the Officer of Inspector General and federal monitor."). What is the retention schedule for logs on calls?

[1]https://aws.amazon.com/blogs/publicsector/harnessing-the-power-of-cloud-startups-deliver-innovative-services-to-public-safety-agencies-faster/

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Audio Recording Systems (Police)

1. The SIR states that "All audio recording devices are managed and maintained by the Technical and Electronic Support Unit (TESU). When an Officer/Detective has obtained consent and/or a court order, having established probable cause, to utilize an audio recording device, s/he makes a verbal request to the TESU. TESU staff completes TESU's Request Form that requires a reason for the request, a case number associated with the investigation, and a copy of the consent form and/or court order. Each request is screened by the TESU Supervisor prior to deployment."
2. Is there are limit to the how long an officer/detective can use the device? What are the limits / safeguards in place for timely use? For example, is there ever a scenario where an Officer/Detective indefinitely records individuals in the scope of the court order and potentially other scenarios outside the scope of the warrant, but only the latter is ultimately transcribed for use as part of a criminal investigation. What safeguards are in place to ensure this does not happen?
3. The SIR states that "[a]udio recording devices capture sounds as they are happening in the moment. The devices do not check for accuracy, as they are simply capturing a live exchange of sounds. They are not interpreting or otherwise, analyzing any data they collect." What happens when the device records audio that is background / not part of a warrant to record but just happens to record other people? Is that data deleted? Is that transcribed?

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I2 iBase (Police)

1. The SIR states "The most important unintended possible consequence related to the continued utilization of the iBase system is the possibility that erroneous links between individuals related to criminal investigations may be considered. However, because all analysis conducted in the RTCC is developed manually by analysts the risk is mitigated by the efficiencies provided by the use of the iBase system."
2. This is deeply concerning. The implicit bias in the network analysis done by analysts themselves can have negative impacts on individuals and communities when unchecked[2]. The SIR states that officers/detectives undergo security training and training on the use of the technology. Is there any training around implicit bias, especially with respect to network analysis?
3. The SIR states "i2 iBase is a relational database environment for searching through investigation data imported from RMS and CAD as well as manually imported information gathered by investigators during the course of a criminal investigation." Is the scope of any search query at all limited or does an Officer/Detective have access to all of the data in the SPD system regardless of scope? For example, if an Officer/Detective searches for a given name in the database will the search return all instances of an entity attached to a given name even if that would relate to different people of the same name, individuals who may not be involved in the specific criminal investigation for which the visualisation is being created?
4. The SIR states "[t]he software logs: user sign on/off, each time a user accesses any piece of data, and any data manually added by a user. These logs are periodically reviewed to ensure proper use of the software; they may also be reviewed at any time by the Seattle Intelligence Ordinance Auditor." Are any of these logs captured by the technology provider? What is the retention policy / other data handling procedures for this data?
5. Does data from Maltego (or other publicly available info) go into I2? Do analysts generate links between this external data with internal data?

[2] https://gspp.berkeley.edu/assets/uploads/research/pdf/SpencerCharbonneauGlaser.Compass.2016.pdf

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Maltego (Police)

Governance

1. What does it mean that "Maltego is governed by SPD Policy"? What is this policy specifically?
2. What is the 'City of Seattle Intelligence Ordinance'? Is it this?: https://www.washingtonpost.com/archive/politics/1979/07/03/seattle-law-limits-police-in-intelligence-gathering/916c9159-31da-4a1f-ab55-9804ba5cfa19/
3. The governance structure also includes the 28 Code of Federal Regulations [CFR] Part 23 and Criminal Justice Information Services (CJIS) requirements, which are both very broad criminal justice/intelligence guidelines. Among other capabilities, Maltego is able to pull intelligence from the dark web in reconnaissance efforts. Is there any governance or training for ethical hacking?
4. The SIR states that "[a] paid version includes the ability to stand up an internal SPD server that would allow for logging, but that would involve significant costs to implement and maintain." The logging makes it easier for audits by the department and also the Office of Inspector General. Is this a requirement to ensure proper auditing? While access logs can be inspected on the workstations utilizes to use Maltego, these logs may not necessarily retain the search parameters and the actual use of the technology.

Use of the Technology

1. "Maltego…allows investigators to analyze connections between individuals related to criminal investigations." Is Maltego used only for "criminal investigations"? Maltego has many more capabilities beyond criminal investigations. This is not simply a tool used for or by law enforcement. Maltego can be used for all types of data collection, analysis, and tracking. Maltego's users vary. In fact, the company has a discounted program for academics and non-profits. However, this also means Maltego can be used by anyone, not just law enforcement, academics, and nonprofits, but by anyone attempting to collect and track key information on groups or individuals.
2. "The tool is used by law enforcement partners". Who are the "partners"? Is this service contracted out? If so, to whom? Are the "partners" from the public or private sector?
3. "Maltego is used infrequently to investigate cybercrime incidents." Why infrequently? What is the average frequency of use?
4. "This software simply visualizes data collected is from publicly available information on the internet." Data visualization is just one capability, but not its primary function. Software like Tableau is primarily used for importing and visualizing big data sets. Maltego is also heavily used to pull data from APIs, collate the data, and produce intelligence based on the collected and organized data. It also has capabilities, such as operating on the dark web.
5. "Data, when pertinent, is exported as a spreadsheet and/or visual diagram, at which point it is handled per department policy regarding digital evidence as part of a criminal investigation." How is this data considered evidence? Information that is not considered "evidence" could indicate that a certain person/entity is under criminal investigation; so how is that information protected?

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Protections

1. "SPD utilizes Maltego to investigate cybercrimes, primarily in determining the digital origin of attacks against cyber infrastructure." And "Maltego is restricted to use for the related security incident and/or pertinent criminal investigations and subject to Department Policy regarding ongoing criminal investigations."
2. "Primarily" in determining the digital origin of attacks? What else is it used for then?
3. "Restricted to use…" by whom or what policy specifically?
4. The use of this tool for the purposes of the SPD is difficult to justify. OSINT tools like Malego are used PRIMARILY for intelligence gathering in proactive defensive security, or as some even call it, "pre-crime". Intelligence is only useful before an attack, in order to help prevent it from occurring. But as this justification for use explains, the primary purpose of this tool will be used for investigations on crimes or incidents already committed.It is likely the SPD and all other PDs already have sophisticated tools designed specifically for this very purpose. Yes, Maltego can be used for all types of investigations, which can include criminal activities or even non-malicious vulnerability audits. But what is striking is that the primary function of this tool, as justified by SPD, will not be utilized. Main point: until there is clearer policy on the limitations of the SPD's use of Maltego, it will remain a powerful tool with multiple capabilities at the hands of law enforcement.
5. "Search warrant authorization is required, and would be obtained, to further any investigation into accessing private individual information." Maltego is only authorized for use with a warrant? This includes all cyber-crime and cyber attacks?
6. "Maltego is used by two trained TESU detectives within TESU, and by no other entity." "Users of Maltego undergo training on the use of the software, which includes privacy training." Law enforcement/criminal justice training is VERY different from intelligence analysis and/or data analysis training. What type of training and background do these detectives have? Is there any implicit bias training for the TESU officers/detectives who use the technology? (Stated policy on bias-based policy does not indicate specific training or mitigation of bias before it happens: 5.140 - Bias-Free Policing - Police Manual | seattle.gov)
7. "Data collected by Maltego is stored on an encrypted workstation within TESU." What type of encryption? This this stored on an on-premises server, hybrid, or cloud?

Use Case Example: "The City's network is attacked with ransomware"

1. The scenario described may not actually unfold as described. It is likely that upon a ransomware attack, the City would contract a cybersecurity consulting company it has a partnership with for incident response, which would include a team of highly trained engineers and security operation center (SOC) professionals to stop the attack and attempt to recover any lost or damaged data. It would also include attribution of the threat actor. How effective SPD's involvement would actually be in this case comparatively?