

A low-angle shot of a black metal pole with several surveillance cameras. Two large, white, rectangular cameras are mounted at the top, pointing in different directions. A smaller, white, dome-shaped camera is mounted lower on the pole. The background is a clear blue sky with some light clouds and the tops of green trees are visible at the bottom and left sides.

Surveillance Camera Policy Review

South Orange Community Police Collaborative
Surveillance Camera Subcommittee

May 13, 2021

Background

The Community Police Collaborative (CPC) Committee was informed at its March meeting of a plan to install new surveillance cameras in South Orange Village. These would first replace existing cameras, then add 8-11 new cameras per year over the next five years (50-70), at a cost of approximately \$50,000 per year. (Please see next slide inserted.)

The new cameras would have greater capabilities than the existing cameras, and the data they record would be stored in the cloud by an outside vendor, Verkada.

Update on 50-70 cameras (added post presentation)

- Trustees Coallier and Jones reported just prior to this presentation that they had joined President Collum in a meeting with the police department on Friday, May 7th.
- The 50-70 cameras referenced in the media is not an active, current plan.
- Trustees also reported that there would be a community meeting to address some of the issues as identified on the next slide.

Background continued

The CPC and community members voiced a number of concerns: number of cameras proposed, capabilities of the cameras, cost and need.

These concerns fell into three main areas:

1. Civil liberties concerns;
2. Concerns for the security of footage stored in the cloud; and
3. Effectiveness, and cost effectiveness, of surveillance cameras generally.

Background continued

The CPC formed a subcommittee to look into the plan and to investigate these concerns. This involved, as requested:

- a review of available research,
- a review of available data on surveillance cameras generally,
- specific research related to crime reduction/deterrence, civil liberty concerns, and data privacy issues, and
- best practices guides for policy guidance

Subcommittee Concerns:

Surveillance cameras increase surveillance of already highly surveilled populations

A comprehensive study of surveillance cameras in the UK (where most data exists) found that:

- Men were nearly twice as likely to be the targets of surveillance than their presence in the population would suggest.
- Teenagers – who accounted for less than 20% of the population in the study – made up 40% of targeted surveillances.
- Black people were between one-and-a-half and two-and-a-half times more likely to be targeted for surveillance.

Subcommittee Concerns:

No clear policy on facial detection

With audio and cell phone location information already regulated (and most cameras do not record audio because they would violate federal wiretapping regulations), we would expect laws regulating the use of high definition cameras with face recognition capabilities to follow suit.

To date, 13 US cities have **banned** police departments from using facial recognition technology, the majority in California and Massachusetts.

Acting Chief Dolinac has explained that SOPD will not utilize the facial recognition capabilities of the cameras, but instead restrict them to face detection only. This is not specified in the policy.

Subcommittee Concerns:

Data storage and security

The vendor hired by South Orange to store the surveillance camera data contracted with the cameras' manufacturer, Verkada. Data from the cameras is stored locally on the camera, but if it is to be archived will be uploaded wirelessly, over the public internet, to Verkada's data centers. The data from SOPD's previous generation of cameras has been stored on the Police Department's own servers.

The use of cloud storage naturally raises hacking concerns. Indeed, on March 9th 2021 hackers gained access to live feeds from 150,000 Verkada cameras in police departments, jails, hospitals, schools and private businesses. The hackers also claimed to have access to the entire video archive of Verkada customers.

Subcommittee Concerns:

No evidence of crime reduction effects with this modality

A recent meta-analysis of all CCTV studies:

- Surveillance cameras can reduce crime, most often in car parks with active monitoring. Passive monitoring is not associated with deterrent or crime-reduction effects.
- Cameras do not lead to a reduction in violent crime.
- Recommend narrow targeting of camera use and no “stand alone” camera interventions.

Note: Acting Chief Dolinac and Sgt. Lombardi reported to the Village Green that footage from cameras in South Orange would not be actively monitored, although Policy 2.42 states that Tour Commanders “shall have the ‘grid’ view open and available for monitoring”. The grid view are thumbnails.

Policy Guidance

We looked at three main sources for best practices in surveillance policy:

- Using Public Surveillance Systems for Crime Control and Prevention: A Practical Guide for Law Enforcement and Their Municipal Partners (The Urban Institute Justice Policy Center & The Office of Community Oriented Policy Services of the US Department of Justice) ("The Guidebook").
- CCTV: Developing Privacy Best Practices, Report on the Department of Homeland Security (DHS) Privacy Office Public Workshop.
- Establishing Video Surveillance Policies, Silva Consultants, an independent security consulting service.

We also looked at best practices in educational settings, as requested by Trustee Coallier and recommend the following for further reading:

<https://www.aasa.org/content.aspx?id=25932>; <https://ascip.org/wp-content/uploads/2016/06/Best-Practices-for-Cameras-in-Schools-2017.10.20.pdf>

Note: The South Orange Maplewood School District is in the process of updating its policy on video surveillance and has proposed adding the following to standard NJ school board policy: "The MOU shall limit the circumstances under which law enforcement shall view live streaming video to emergencies in progress, such as active shooter situations, and prohibit law enforcement from accessing live stream video as part of a non-emergent investigation."

Policy Guidance continued

Key points:

- Prior to investing in public surveillance technology, jurisdictions should carefully examine their goals, assess their budget, consult relevant stakeholders, anticipate possible public reaction, and review policies and legal implications.
- Failure to address privacy and civil liberties can undermine public support for the use of CCTV and erode confidence in government's ability to protect privacy and civil liberties
- Jurisdictions must consider the potential negative impact of public surveillance on residents' privacy rights and civil liberties and should design systems to minimize those potential harms.

Policy Guidelines

- Topics that video surveillance policy should address at a minimum (some were addressed with varying degrees of specificity)
- Purpose of video surveillance system – SOPD policy is broad and includes training and protection from false allegations
- Where cameras are typically used – SOPD policy does not have a camera placement policy
- Where cameras are generally never used – SOPD policy does not have a camera placement policy
- Where video surveillance system is monitored – SOPD policy mixes live streaming and passive investigations purposes
- How video is recorded and for what duration - SOPD has clear policy on internal storage, and 30 days at vendor
- Who is responsible for the management of the video surveillance system - SOPD has clear policy on internal controls, nothing on vendor controls
- Who has access to video recordings and for what purposes - SOPD has clear policy on downloading and storing, but not on viewing
- The use of covert cameras - SOPD policy does not define the type of cameras to be used and for what purposes
- Procedures for requesting video recordings – SOPD policy has internal controls for requests internally, no record keeping noted for external requests from other agencies (which is covered in the policy but in practice is rare.)
- Archival storage of video recordings related to security incidents – SOPD policy is clear on who and how video can be archived, however there is no mention of a tracking system or controls of storage devices

Recommendations

The sub-committee recommends that the Board of Trustees (BoT) **PAUSE** the planned expansion of the surveillance camera network until the following steps have been completed and reported back to the CPC and that the BoT determine if this is a cost effective solution:

- 1. Define Purpose: Effectively investigate incidents.**
How will cameras be used for this? Research indicates specific camera types and locations should be chosen for specific purposes. Further, Acting Chief Dolinac shared that surveillance footage is typically used 10-12 per year to investigate serious crimes or accidents in South Orange. The violent crime rate ~~continues~~ seems to be falling in South Orange, ~~as it does nationwide.~~ (edited for accuracy 5/21/21) Does this mean our footage is used primarily to investigate motor vehicle accidents? If that is the case, BoT should consider traffic calming measures to prevent accidents, rather than surveillance to investigate after the fact.
- 2. Define Purpose: Collect Evidence.**
Determine what types of evidence will be collected and how.
- 3. Define Purpose: Assist in identification of criminal actors.**
How will cameras be used for this? What databases will footage be compared to?
- 4. Define Purpose: Protect officers from false allegations.**
Adoption of body worn cameras in June 2021 will render this purpose moot. We recommend removing it from the policy.
- 5. Define Purpose: To aid in the prosecution of offenders.**
- 6. Define Purpose: To assist outside law enforcement agencies.**
What will the criteria be for other agencies accessing SOPD footage? What will the reporting process be and how will SOPD measure its effectiveness?
- 7. Define Purpose: For police training purposes.**
How specifically will footage be used for training? Will identifying information be removed? Will permission of those featured in the footage be sought? This is of particular concern where footage features a minor.

Note: SOPD policy does not identify crime deterrence as a purpose of the cameras, although this is where surveillance cameras have had most success, when signposted and monitored in car parks.

Recommendations continued

8. Add a section to SOPD Policy that defines the different types and placement of cameras to be used (overt, semi covert, covert, fixed view vs. "joy stick" controlled, etc.) Each type of camera has a specific use that should also be defined.
9. Hold public meetings to explain the policy and planned implementation to South Orange residents, as recommended by DHS and the Department of Justice.
10. Request that policy be amended to preclude the use of facial recognition in the future.
11. Consider other storage solutions than the public internet.
12. Place public signage at locations of cameras.
13. Clarify monitoring policy.
14. Clarify the handling of footage used for investigative purposes.
15. SOPD Policy should document the relationship with the vendor with respect to data storage, ownership of the data, and responsibility for data breaches.
16. SOPD Policy should address the implications of potential OPRA requests for footage, including an expectation of time limit for release of footage and process for removing identifying information from individuals featured in the footage, when necessary.
17. Clarify the rationale behind the 30 day storage period. A shorter timeframe may shield more data from potential security breaches and limit impact on civil liberties.
18. Lastly, as community engagement has been identified as a key role of the CPC, we request that SOPD policy decisions and actions be discussed publicly with the CPC before moving forward to a vote.

Supplementary Slides

Background continued

Resolutions Authorizing the Installation of Cameras

On October 12th, 2020 the Village government passed Resolution #2020-234, “authorizing the award of contract by NJEdge Cooperative to Mind’s Eye Technologies for the purchase of a various cameras and installation throughout the Village in amount not to exceed \$49,657.00.”

This resolution authorized the purchase and installation of 11 new cameras in South Orange. The resolution went on to say “It is the intention of the Village of South Orange to deploy these cameras to increase the overall safety and security of its citizens and visitors to the municipality. It is also intended that the camera system, once completely deployed, to allow selected Police and Administrative staff to utilize functions, features and operations of the system. This surveillance solutions become a core component of the Village of South Orange’s safety, security and policing plan.”

Background continued

Resolutions Authorizing the Installation of Cameras

Camera locations specified were:

- Scotland and Taylor
- South Orange Ave and Turrell, Westbound
- 25 Valley Street, Facing North
- South Orange Ave
- Ashley Marketplace
- Irvington Avenue and Prospect
- Irvington Avenue and Ward
- Valley and Arnold
- Massel, outside Founders Park
- SOPAC Way (3rd Enclosure)
- River Walk

Background continued

Resolutions Authorizing the Installation of Cameras

On November 11th, 2020, the Village passed Resolution #2020-258, “authorizing execution of a memorandum of understanding between the Township of South Orange Village and the County of Essex for the installation and maintenance of surveillance cameras and equipment on traffic signals and rights of way belonging to the County of Essex.

The wording of the resolution reads, in part, “local law enforcement agencies often seek the aid of other government entities in their efforts to combat crime, protect life and property and promote public safety” and “in order to address public safety concerns...the Village’s Police Department may install and maintain surveillance cameras and equipment on traffic signals and within rights of way all belonging to the County.”

Background continued

SOPD Policy Governing the use of Surveillance Cameras

Policy 2:42, covering Wireless Digital Video Systems (WDVS) and Criminal Intelligence, went into effect March 21st, 2021.

In outlining the purpose of the policy, the document states, in part: “the regular use of the WDVS will provide officers with a means to effectively investigate incidents, collect evidence, assist in identification of criminal actors and may also serve to protect officers from false allegations.” It goes on to say that the cameras will be used “to aid in the prosecution of offenders, to assist outside law enforcement agencies, and for police training purposes.”

*Note: Governor Murphy signed a bill into law on November 24th, 2020, mandating that all NJ police officers wear body cameras. The South Orange resolution approving surveillance cameras had already been passed. Body worn cameras must be purchased with State funds by every NJ police department by June 2021. They will serve better than surveillance cameras to protect officers from false allegations, rendering moot that aspect of the policy’s stated purpose.

Subcommittee Concerns

1. Civil Liberties Concerns

While the capabilities of surveillance technology have grown exponentially in recent years, laws regulating their use have struggled to keep up.

Some rulings could be considered analogous. The Supreme Court ruled in *Carpenter v. United States*, for example, that a search warrant is required to obtain cellphone location information. Chief Justice Roberts said that the decision ensures "that the progress of science does not erode the Fourth Amendment" guarantee of privacy.

Further, most surveillance cameras do not record audio because to do so would violate federal wiretapping laws.

Subcommittee Concerns

2. Concern for the security of footage stored in the cloud

The cameras purchased for South Orange have very high 4k resolution and use telephoto lenses, enabling them to capture high quality images. They also use standard LTE modems, making them both vulnerable to hacking and expensive to operate.

Subcommittee Concerns

3. Effectiveness of Security Cameras

Primary source: **CCTV surveillance for Crime Prevention. A 40-year systematic review with meta-analysis.** 2019, *Criminology & Public Policy*, Piza et al.

This paper provides the most recent and credible estimates of crime reduction for CCTV interventions — it is a meta-analysis of studies on the topic.

Key takeaways:

- Surveillance cameras can reduce crime, most often in car parks with active monitoring. Passive monitoring is not associated with deterrent or crime-reduction effects.
- Cameras do not lead to a reduction in violent crime.
- Recommend narrow targeting of camera use and no “stand alone” camera interventions.