STATEMENT OF
ALBERT FOX CAHN, ESQ.
EXECUTIVE DIRECTOR
SURVEILLANCE TECHNOLOGY OVERSIGHT PROJECT (“S.T.O.P.”)

BEFORE COMMITTEE ON TECHNOLOGY AND COMMITTEE ON SMALL BUSINESS, THE NEW YORK CITY COUNCIL

FOR A HEARING CONCERNING
HOW TECHNOLOGY CAN ASSIST SMALL BUSINESSES DURING THE PANDEMIC

PRESENTED
October 30, 2020
1. Introduction

Good afternoon, my name is Albert Fox Cahn, and I serve as the Executive Director of the Surveillance Technology Oversight Project (“S.T.O.P.”). S.T.O.P. advocates and litigates for New Yorkers’ privacy, fighting discriminatory surveillance. Thank you, Chairmen Holden and Gjonaj, for holding this hearing today and for the opportunity to testify.

The COVID-19 pandemic has forced businesses of all sizes to rethink how they keep employees and customers safe. Sadly, many New York businesses are being taken for a ride, as vendors sell invasive and unproven medical technologies that may prove to be little better than high-tech snake oil. Businesses spend millions on tools like thermal imaging, proximity detection, and immunity passports, often without any peer-reviewed evidence they are effective, let alone FDA approval.

Many of these systems risk creating a false sense of security, undermining evidence-based measures, and eroding civil rights. Of course, where technology can actually keep New Yorkers safe, rather than creating an illusion of safety, we support it; but these systems are sadly the exception and not the rule.

2. Thermal Temperature Scans

Many restaurants and businesses use thermal scans to detect an elevated temperature. While some medical-grade thermal systems are able to take a reliable temperature, commercial systems vary widely in their accuracy.\(^1\) Many of these systems extrapolate skin temperature to determine internal body temperature, but the results can be mixed.\(^2\) In recent days, I’ve seen restaurants scan my own temperature with devices that measure the temperature of my inner wrist, rather than my forehead or ear. Fluctuation in the temperatures of extremities could easily lead to a false positive or false negative.

Even if these devices could detect internal temperatures accurately, simply scanning for fevers is a highly ineffective method for determining if someone has COVID-19: a fever is only one of several symptoms, many carriers are asymptomatic, and many people will have elevated temperatures for unrelated reasons.\(^3\) Body temperatures fluctuate throughout the day, impacted by environmental factors,\(^4\) menstruation,\(^5\) and mere inflammation.\(^6\) Many people also routinely take common medications, like aspirin, which reduce temperatures.\(^7\)

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\(^2\) Id.

\(^3\) Id.

\(^4\) Ace et al., *supra* note 11.


3. Wide-Area Thermal Scans / Computer Vision

Wide-Area Thermal Scans and Computer Vision products amplify many of these concerns. First, the cameras used for these systems are generally not designed for medical use. But unlike the handheld devices, which are typically used to scan only a single person, computer vision systems analyze live video feeds of a large area.

Unfortunately, the technology is ineffective for detecting elevated body temperatures where multiple individuals are moving in different directions in a single frame. Additionally, the accuracy rate plummets as the distance between the camera and the target increases. Rather than acknowledging that these devices have significant accuracy issues, several companies have buried the evidence and made exaggerated and unproven marketing claims.

4. Air Filtration Technology

Air filtration is indispensable to safely reopening indoor spaces, including stores and restaurants. Sadly, right now we are in the wild west of air filtration, with far too little guidance on how to effectively safeguard the air we breathe indoors. These systems filter pollutants or contaminants from the air, including the COVID-19 virus. However, some of these systems may not provide the volume and quality of air filtration to make even low-density indoor activity safe. We need to provide businesses the resources to understand how these systems work and what their limits are. Above all, we need to ensure that businesses don’t waste funds on systems that are more hype than help.

5. Immunity Passports & Registration Requirements

Several countries have either discussed or implemented “immunity passports,” which are backward-looking documents “certifying” that the holder previously had COVID-19 and will not carry or contract the virus again, enabling them to return to some sense of normalcy. These raise numerous concerns. First, there is a dearth of evidence that a previously infected person cannot later be reinfected, thus creating a false sense of security that may lead to increased infection numbers. There are also inequity concerns that these solutions will create tiers of first- and second-class New

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8 Roxby, supra note 1; Schaller et al., supra note 6.
10 Schaller et al., supra note 6.
11 Ethan Ace et al., Detecting Coronavirus Fevers With Thermal Cameras, IPVM (Mar. 15, 2020), https://ipvm.com/reports/thermal-wuhan.
14 Id.
16 Id.
17 Id.
Yorkers based on a person’s access to healthcare, exacerbating the racial, age, gender, and wealth disparities already prevalent in New York City.\(^\text{18}\)

6. Tracking through Bluetooth, GPS, and Facial Recognition

Some businesses have also begun tracking their employees to enforce compliance with social distancing guidelines. Some employers have used GPS or Bluetooth functionality, through employees’ cell phones or company-issued badges,\(^\text{19}\) while others have deployed camera systems equipped with facial recognition software to monitor and enforce compliance with social distancing guidelines.\(^\text{20}\)

While it’s unclear if this technology meaningfully helps contact tracing efforts, it also can be—and has been—used for nefarious purposes. For example, when Amazon developed its Distance Assistant system to monitor whether employees were following social distancing rules,\(^\text{21}\) the company then immediately used this information to discipline and fire workers.\(^\text{22}\) Additionally, several former Amazon employees have alleged that they were fired for organizing protests over safety conditions and attempting to unionize.\(^\text{23}\) Tracking employees’ whereabouts and activities—even outside of work, as Amazon has done\(^\text{24}\)—is coercive,\(^\text{25}\) suppresses employee organizing, and ultimately leads to their increased exploitation.\(^\text{26}\) This is especially true in an economic downturn, where employment options are much more limited.\(^\text{27}\)

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\(^{21}\) Id.


\(^{25}\) Jason Del Rey & Shirin Ghaffary, *Leaked: Confidential Amazon Memo Reveals New Software to Track Unions*, Vox: Recode (Oct. 6, 2020, 10:00 AM), [https://www.vox.com/recode/2020/10/6/21502639/amazon-union-busting-tracking-memos](https://www.vox.com/recode/2020/10/6/21502639/amazon-union-busting-tracking-memos) (“Open surveillance is illegally coercive even if managers do not directly threaten or take action based on the information obtained. There is an implied message that the company people will be rewarded and the union adherents will suffer.”).


\(^{27}\) See, e.g., Press Release, N.Y. Dep’t of Labor, NYS Economy Added 75,300 Private Sector Jobs in September 2020 (Oct. 15, 2020), [https://labor.ny.gov/stats/pressreleases/pruistat.shtm](https://labor.ny.gov/stats/pressreleases/pruistat.shtm) (“New York State’s seasonally adjusted unemployment rate decreased from 12.5% to 9.7% in September 2020. In September 2020, the number of unemployed New York State residents decreased by 302,000, while labor force levels decreased by 362,900.”).
7. Customer Registration

Some businesses have also considered or implemented registration requirements, under which anyone who visits a business must register for contact tracing purposes. This type of data collection is potentially indispensable to public health officials, but it also creates a potent threat to New Yorkers. Currently, there is no law to prevent the NYPD or ICE from accessing this data or other contact tracing data to arrest and deport our neighbors. We renew our calls on Governor Cuomo to sign S8450 / A10500 into law immediately, preventing misuse of contact tracing data. But we must go further at the city level, banning retention or misuse of contact tracing data held by small businesses and restaurants.

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We must help small businesses recover from this pandemic and economic downturn. But at the same time that we harness technology to help New Yorkers through this crisis, we must also push back on technology that can be misused to harm our city. Thank you for the opportunity to testify and for your consideration.

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