CHICAGO’S VIDEO SURVEILLANCE CAMERAS: A PERVERSIVE AND UNREGULATED THREAT TO OUR PRIVACY

a report from the

ACLU of Illinois

February 2011
“I DON’T THINK THERE IS ANOTHER CITY IN THE U.S. THAT HAS AN EXTENSIVE AND INTEGRATED CAMERA NETWORK AS CHICAGO HAS.”

Michael Chertoff
former U.S. Homeland Security Secretary
# TABLE OF CONTENTS

**EXECUTIVE SUMMARY**
- A. Chicago’s surveillance cameras...
- B. The problems with Chicago’s surveillance cameras...
- C. The ACLU’s proposals...
- D. The ACLU’s investigation...

**REPORT**
- I. Chicago’s surveillance cameras...
  - A. Access to 10,000 cameras...
  - B. The network: “Operation Virtual Shield”...
  - C. Pan-tilt-zoom, facial recognition, and automatic tracking...
  - D. The future...
  - E. Absence of regulation...
  - F. Absence of debate and disclosure...

- II. Cameras in other Illinois communities...
- III. The problems with surveillance cameras...
  - A. Freedom to be anonymous...
  - B. The chill on First Amendment rights...
  - C. Employee misuse in other cities...
    - 1. Improper focus on a person’s body...
    - 2. Improper release of video...
    - 3. Racial disparate impact...
  - D. Opportunity costs...

- IV. Do cameras deter crime?...
- V. The ACLU’s proposals...
  - A. A moratorium on new cameras...
  - B. An open and thorough review...
  - C. Regulation of the remaining cameras...
    - 1. Pan-tilt-zoom (“PTZ”)...
    - 2. Facial recognition and tracking...
    - 3. Recording private areas...
    - 4. Retention of camera images...
    - 5. Dissemination of camera images...
    - 6. Periodic audits...
    - 7. Public notice...
    - 8. Enforcement...
    - 9. Linked private cameras...
    - 10. Traffic enforcement cameras...

**ENDNOTES**
EXECUTIVE SUMMARY

Chicago has our nation’s most “extensive and integrated” network of government video surveillance cameras, according to former U.S. Homeland Security Secretary Michael Chertoff. While the City of Chicago is secretive about the number of cameras (as well as many other critical aspects of its camera program), the City does not dispute the repeated public reports that it has access to 10,000 publicly and privately owned cameras throughout the City. In the downtown district, virtually every segment of the public way is under video surveillance. These technologically sophisticated cameras have the power to automatically identify and track particular persons, and the capacity to magnify and make visible small details and objects at great distances.

Nevertheless, the City seeks to expand and enhance the level of surveillance. Mayor Daley has announced a plan to place a camera “on every corner” of the City. In the words of another top City official, the objective is to “cover one end of the city to the other.”

The American Civil Liberties Union of Illinois believes that Chicago does not need a camera on every sidewalk, on every block, in every neighborhood. Rather, our City needs to change course, before we awake to find that we cannot walk into a book store or a doctor’s office free from the government’s watchful eye.

We urge the City to order a moratorium on the expansion of the camera system. Then the City should initiate a thorough and open review of this surveillance system, including whether to reduce the number of cameras. Finally, for those cameras that remain, the City should implement new rules to safeguard individual privacy.

The ACLU hopes that this report – the first large-scale, independent analysis of Chicago’s camera system – will contribute to an informed public dialogue about the future of Chicago’s system of surveillance cameras.
A. CHICAGO’S SURVEILLANCE CAMERAS

Many of Chicago’s cameras are highly visible to the general public, like the more than 1,000 cameras with flashing blue lights installed by the Chicago Police Department. Many others are unmarked or invisible. Under a program known as “Operation Virtual Shield,” all of these public and private cameras are integrated together, and monitored by the City’s Office of Emergency Management and Communications (“OEMC”).

In addition to vast numbers and tight integration, Chicago’s cameras have three powerful and potentially invasive technologies:

- The cameras have a “pan-tilt-zoom” capacity, meaning operators can increase substantially the size of the captured images.

- The cameras have a “facial recognition” capacity, meaning a computer can automatically search for a particular person’s face.

- The cameras have an “automatic tracking” capacity, meaning a computer can automatically track a person or vehicle moving along the public way, jumping from one camera to the next.

All three of these technologies far exceed the powers of ordinary human observation, and dramatically increase the power of the government to watch the public.

The reach and expanse of the Chicago surveillance camera system also serves as a catalyst for other communities to expand their own systems. At least ten other Illinois communities have installed law enforcement video surveillance cameras. Although these systems are not as large, integrated, or powerful as Chicago’s network, other communities clearly are following Chicago’s lead.
B. THE PROBLEMS WITH CHICAGO’S SURVEILLANCE CAMERAS

Chicago’s camera network invades the freedom to be anonymous in public places, a key aspect of the fundamental American right to be left alone. For City residents, the personal habits of daily life are carried out on our streets and sidewalks. While earlier camera systems tracked only how some people spend some of their time in the public way, a camera on every corner – coupled with pan-tilt-zoom, facial recognition, and automatic tracking – results in government power to track how all people spend all of their time in the public way.

Each of us then will wonder whether the government is watching and recording us when we walk into a psychiatrist’s office, a reproductive health care center, a political meeting, a theater performance, or a book store. While the dystopia described by George Orwell in “1984” has not yet been realized, Chicago’s current 10,000 surveillance cameras are a significant step in this direction. And a camera “on every corner” would be an even greater step.

Further, Chicago’s growing camera network is part of an expanding culture of surveillance in America. Combined with other government surveillance technologies (such as seizure of phone, email, and credit card records, RFID chips, and GPS devices), cameras can turn our lives into open books for government scrutiny.

Moreover, Chicago’s camera network chills and deters lawful expressive activities protected by the First Amendment, like attending a political demonstration in the public way. Chicago has a long history of unlawful political surveillance, including the notorious “Red Squad” of the Chicago Police Department, which violated the rights of thousands of innocent people from the 1920s through the 1970s. Today, the Chicago police film political demonstrations, so long as the police believe they comply with the City’s nebulous requirement of a “proper law enforcement purpose.” Reasonable people will respond to past and present Chicago police practices by staying away from controversial events.

Chicago officials will not say whether any of its employees have been accused of abusing the camera system. Other cities have seen abuses from much less extensive camera systems. Male camera operators have ogled women. Sensitive images have been improperly disclosed – like the image of a person committing suicide, which was later posted to a violent pornography website. A study from England found that camera operators targeted black civilians, substantially out of proportion to both their suspicious conduct and their presence in the population being monitored.

Finally, it is important to consider what Chicagoans are not getting, because of
the more than $60 million that the City has spent on our nation’s largest and most integrated camera network. For example, these taxpayer funds might have helped fill the 1,000 vacancies in Chicago’s understaffed police force.

In light of these civil liberties and civil rights concerns, the ACLU opposes the unreviewed expansion of Chicago’s camera system, and the absence of critical privacy regulations, even if the camera system were proven to reduce crime. In any event, numerous studies by independent scholars have concluded that video surveillance cameras in fact do not reduce violent crime, and only in certain circumstances reduce property crime (such as in parking garages). While the City asserts that its cameras reduce crime, it has not supported this assertion with methodologically sound reports or underlying statistical data. Also, while the City asserts that its cameras have led to 4,500 arrests in the last 4 years, that is less than 1% of all the arrests during that time.

C. THE ACLU’S PROPOSALS

Given the many grave problems created by Chicago’s cameras, and the lack of proof that they are effective, the ACLU of Illinois offers the following proposals.

First, there should be a moratorium on the deployment of more cameras.

Second, during this moratorium, there should be a comprehensive review of the past, present, and future of Chicago’s surveillance camera system. This review should define the City’s objectives, consider all of the costs, and weigh all of the evidence about effectiveness. This review should be conducted in the open, and solicit the input of the general public. Perhaps most importantly, this review should consider whether to reduce the number of cameras in the City’s system.

Third, for the cameras that remain operational, there should be new safeguards to protect the privacy and other rights of the public. Specifically, the City should:

1. PAN-TILT-ZOOM (“PTZ”)

   a) Require individualized reasonable suspicion either of criminal activity or of a threat to public safety, before a camera operator uses the PTZ function to magnify the image of a particular person, or anything in his possession.

   b) Require individualized reasonable suspicion either of criminal activity or of a threat to public safety, before a camera operator uses the PTZ function to either aim a camera at activity protected by the First Amendment, or to magnify such activity.
c) Prohibit camera operators from considering race, national origin, ethnicity, religion, gender, sexual orientation, or sexual identity when deciding whether to use the PTZ function to aim a camera at a particular person, or to magnify the image of a particular person – except when there is a “look-out” order providing specific information linking a person with one of these demographic characteristics to a particular criminal incident.

2. FACIAL RECOGNITION AND AUTOMATIC TRACKING

Require probable cause either of criminal activity or of a threat to public safety, before using the camera system to perform facial recognition or automatic tracking of a particular individual.

3. RECORDING PRIVATE AREAS

Prohibit the use of cameras to record activities taking place in private areas, such as a private residence or business. (While a CPD training DVD states this rule, it does not currently appear in a written policy.)

4. RETENTION OF CAMERA IMAGES

Prohibit retention of cameras images (beyond a short period of time, such as 7 days), unless a supervisor determines that (1) there is reasonable suspicion that the images in question contain evidence of criminal activity, or (2) the images are relevant to an ongoing investigation or pending criminal trial.

5. DISSEMINATION OF CAMERA IMAGES

Prohibit dissemination of camera images to third parties, except that a supervisor can disseminate images:

   a) To another governmental agency, if (1) there is reasonable suspicion that the images in question contain evidence of criminal activity, or (2) the images are relevant to an ongoing investigation or pending criminal trial.

   b) To a criminal defendant, if the images in question are related to the pending charges.

6. PERIODIC AUDITS

Require:

   a) An annual audit of the City's camera systems to identify and evaluate: (1) the effectiveness of the cameras at reducing crime or achieving some
other legitimate government purpose; (2) the impact of the cameras on the privacy and other civil rights and civil liberties of the general public; and (3) any misuse of the cameras, and the corrective action taken.

b) Public disclosure of such audits, including all electronic statistical data used to evaluate camera effectiveness.

7. PUBLIC NOTICE

Require:

a) Public notice and an opportunity to be heard prior to installation of any new cameras.

b) Public notice of the location of all cameras linked to the City's camera network.

8. ENFORCEMENT

Require:

a) Supervisory review of camera operators to ensure their compliance with the rules herein, and any other rules regarding the City's cameras that protect the privacy and other civil rights and civil liberties of the general public.

b) Investigation of all camera operators alleged to have violated such rules.

c) Discipline of all camera operators found to have violated such rules.

9. LINKED PRIVATE CAMERAS

As to all private sector cameras that are linked into the City's camera network, apply all of the rules herein, and any other rules regarding the City's cameras that protect the privacy and other civil rights and civil liberties of the general public.

10. TRAFFIC ENFORCEMENT CAMERAS

a) Pictures may be taken only while a traffic infraction is occurring.

b) Pictures may be taken only of the vehicle and license plate, and not of the face of the motorist or passengers.

c) Pictures may be used only for the enforcement of a traffic infraction.

d) Pictures shall be destroyed upon completion of the enforcement of a
traffic infraction.

e) Intersections with traffic enforcement cameras shall be clearly marked.

D. THE ACLU’S INVESTIGATION

The ACLU of Illinois has investigated the nature, scope, capacity, and regulation of Chicago’s system of video surveillance cameras. The ACLU has reviewed the information in the public domain, including government records and media accounts. Moreover, the ACLU used the Illinois Freedom of Information Act (“FOIA”) to obtain records from the City, including policies, forms, a training DVD, reports regarding effectiveness, and contracts providing City access to private cameras. The law firm of Miller Shakman & Beem served as ACLU co-counsel in the administrative enforcement of this FOIA request. Unfortunately, the City refused to state whether it has additional policy and training records; refused to disclose any records concerning alleged misuse of the cameras, or even to state whether there have been such allegations; and did not disclose any electronic data, including the data underlying the effectiveness reports. The ACLU also used FOIA to obtain records from many other Illinois communities that use video surveillance cameras.

In March 2010, the ACLU repeatedly asked the City for permission to visit the Operations Center of the OEMC, in order to view and better understand the nerve center of the City’s camera system. Unfortunately, the City did not respond.

In April 2010, the ACLU sent the City a letter proposing the new regulations stated above. Again, the City did not respond.

This lack of transparency and unresponsiveness concerning a partially covert surveillance system bodes ill for the residents of Chicago, of whom 10,000 are ACLU members and supporters.
Part I of this report describes the nature, scope, and capacity of Chicago’s network of video surveillance cameras used for law enforcement and public safety purposes. Part II discusses such cameras in other Illinois communities. Part III sets forth the problems with such cameras, including invasion of the freedom to be anonymous, deterrence of free speech and assembly, misuse by government employees, and the squandering of scarce law enforcement resources. Part IV rebuts the assertion that Chicago’s cameras deter crime. Part V states and explains the ACLU’s proposals.

A. ACCESS TO 10,000 CAMERAS

The City of Chicago has access to a vast network of both public and private video surveillance cameras. Michael Chertoff, the former Secretary of the U.S. Department of Homeland Security, recently said, “I don’t think there is another city in the U.S. that has as an extensive and integrated camera network as Chicago has.” While the City will not confirm the total number of cameras in the network, it does not dispute the repeated reports that it has access to more than 10,000 cameras throughout the city. The City has built this vast camera network in less than ten years. The federal government has invested tens of millions of dollars in Chicago’s camera network.

This network has several critical parts. The Chicago Police Department (“CPD”) has placed cameras called “Police Observation Devices,” or “PODs,” throughout the city. Currently there are 1,260 PODs, according to a list on the CPD’s website. Many are highly visible to the public, because they are in boxes marked with the police logo and topped with blue flashing lights. Some newer PODs are smaller and “less overt,” according to the CPD. These newer PODs have blue lights that can be turned off, and can be placed in less obvious locations like rooftops.

The City also has access to cameras installed by other government bodies.
For example:

- The Chicago Public Schools ("CPS") have over 4,500 cameras inside and around their buildings.\textsuperscript{11}

- The Chicago Transit Authority ("CTA") has 1,800 cameras on its buses and at its train stations.\textsuperscript{12} It plans to have more than 3,000 cameras in its train system by the end of 2010, with 20 cameras at each train station.\textsuperscript{13}

- O'Hare airport has at least 1,000 cameras.\textsuperscript{14}

- The McCormick Place Convention Center and Navy Pier each have hundreds of cameras.\textsuperscript{15}

Many additional cameras are owned and operated by the Chicago Park District,\textsuperscript{16} Chicago Housing Authority,\textsuperscript{17} Millennium Park,\textsuperscript{18} and Midway Airport.\textsuperscript{19}

In addition to these public cameras, Chicago has access to privately owned cameras used to secure at least eleven buildings, including the Willis Tower (formerly known as the Sears Tower), the Boeing building, and the John Hancock building.\textsuperscript{20} Each private building presumably has large numbers of cameras aimed at adjoining streets and sidewalks. According to the City's contracts with the buildings, the City may only access images from these private cameras in an emergency.\textsuperscript{21} The City continues to recruit private businesses to join the network.\textsuperscript{22}

**B. THE NETWORK: “OPERATION VIRTUAL SHIELD”**

All of the City's various cameras, and many cameras of other public and private bodies, are linked together into a single system called “Operation Virtual Shield.”\textsuperscript{23} This network is operated by a City agency known as the Office of Emergency Management and Communications ("OEMC").\textsuperscript{24} As part of its disaster prevention and management function, the OEMC has a command center where all the Operation Virtual Shield cameras can be monitored.\textsuperscript{25} As part of its function as the City's 911 call center, the OEMC uses cameras at the scene of a call to provide information to the police officers being deployed to that scene.\textsuperscript{26}

Chicago Police Officers can view and operate the cameras at the CPD’s Crime Prevention Information Center, at local precinct station houses, and on computers in certain squad cars.\textsuperscript{27}

**C. PAN-TILT-ZOOM, FACIAL RECOGNITION, AND AUTOMATIC TRACKING**

Chicago's system of video surveillance cameras has three powerful, sophisticated, cutting-edge technologies that raise serious civil liberties issues.
First, many of the City's cameras have a pan-tilt-zoom function. That is, a camera operator can cause the camera to move left or right ("to pan"), to move up or down ("to tilt"), and to make the image larger or smaller ("to zoom"). For example, the police department's PODs have this pan-tilt-zoom capacity. Surveillance cameras now used in other cities have a "zoom" function that is powerful enough to see an object less than an inch long from a distance of nearly 500 feet, or to read the text of a book. This power goes far beyond the ordinary human eye. City officials report that many Chicago cameras can "very clearly" read license plates, by zooming in by a factor of 32 times optically, or by a factor of 184 times digitally. Other Chicago cameras have a range of several blocks, and can record images in the dark.

Second, Chicago's camera system is capable of facial recognition. Facial recognition uses computer software to reduce pictures of faces to a set of measurements, such as nose length, and then uses the measurements to find a matching picture of a face. The CTA's new cameras capture high resolution images, zoom up to six times normal perspective, and are capable of facial recognition. These CTA cameras are part of the City's Operation Virtual Shield network.

Third, Chicago's camera system is capable of automatic tracking. That is, the camera system can automatically track where a particular person or vehicle is going or has been, following the person out of the range of one camera and into the range of the next camera. This automatic tracking function is part of the City's larger system of "video analytics," in which computers automatically search for images of interest to City officials, such as a vehicle bearing a particular license plate or having a particular color, or an unattended package. The power of automatic tracking, combined with the great density of cameras in downtown Chicago, is demonstrated by the CPD's investigation of the 2009 gunshot death of the former school board president under a downtown bridge. The CPD watched his drive through the downtown area, with his vehicle jumping from one camera to the next. Doing so, the CPD determined that he was alone in his final moments, and thus that his death was a suicide. Anyone's movements could be automatically tracked in the same way.

D. THE FUTURE

Chicago Mayor Richard M. Daley has stated that he wants a "camera on every corner"
of the City.\textsuperscript{39} He has predicted that by 2016: “We’ll have [cameras on] almost every block.”\textsuperscript{40} Ray Orozco, a former OEMC director, stated, “We’re going to grow the system until we eventually cover one end of the city to the other.”\textsuperscript{41}

The city also seeks to obtain more advanced technology, such as handheld devices to allow officers on the street to have access to the entire camera network.\textsuperscript{42}

\textbf{E. ABSENCE OF REGULATION}

Notwithstanding the massive number of cameras and their powerful technology, Chicago’s use of its extensive camera network is not adequately regulated. The ACLU believes there are several key areas without sufficient regulation, including: (1) the pan-tilt-zoom function, (2) the facial recognition function, (3) the automatic tracking function, and (4) retaining and disseminating images. Further, there are inadequate rules to ensure disclosure of critical information to the public, including camera locations, and adequate data indicating whether the cameras are effective. The need for new protections is fully discussed below. \textit{See infra} Section V.

\textbf{F. ABSENCE OF DEBATE AND DISCLOSURE}

Chicago’s vast camera network was installed with very little public debate and public disclosure. The Chicago City Council has not held hearings on the surveillance program as a whole, or on the goals and objectives of the program. The City has not created a Blue Ribbon commission to study the benefits and costs of cameras, or sponsored “town hall” meetings in the neighborhoods to solicit community input. The camera program has marched forward, without pause or public consideration, based on decisions by a few top City officials.

The Chicago City Council has passed ordinances addressing only particular aspects of the cameras: cameras mounted on street sweepers,\textsuperscript{43} and access to private cameras and those owned by other government bodies.\textsuperscript{44} None of these ordinances address the full scope of the camera network, or provide meaningful regulations for the cameras’ use. Likewise, while individual Chicago aldermen have limited input regarding the placement of a small number of cameras within their wards,\textsuperscript{45} this is no substitute for an open discussion of whether to put up 10,000 or 20,000 cameras throughout Chicago.

Moreover, the City has not revealed basic information about the cameras, including: (1) the total number of cameras in Chicago’s network, (2) the particular location of a vast number of those cameras, (3) the total amount of money that the City has spent on these cameras, and from what sources, and (4) whether police officers or others with access to the cameras have been accused of abusing them. The City also has not disclosed data necessary to allow the public to independently evaluate whether the cameras are effective.
particular individuals or political groups – and not just one such fact about a person, but all such facts.\textsuperscript{58}

Likewise, according to Judge Alex Kozinski:

\begin{quote}
[T]here's no hiding from the all-seeing network of GPS satellites that hover overhead, which never sleep, never blink, never get confused and never lose attention. . . . [T]hese two technologies alone [GPS tracking coupled with cell phone tracking] can provide law enforcement with a swift, efficient, silent, invisible and cheap way of tracking the movements of virtually any one and everyone they choose.\textsuperscript{59}
\end{quote}

Both jurists concluded that prolonged and secret GPS tracking by government is a search that requires a warrant from a judge, though other jurists have reached the opposite conclusion.\textsuperscript{60} A government camera on every corner, with the capacity to automatically track the daily goings and comings of an unlimited number of people, is at least as dangerous to individual privacy as the GPS tracking in these cases.

The government has many more sources of personal information, beyond the cameras. For example, the OEMC and the CPD have access to numerous government databases containing sensitive information about members of the public.\textsuperscript{61} Further, the government often has the power to seize our phone, email, and credit card records. More technologies are emerging, such as face and eye scans, and radio frequency identification (“RFID”) tags. Over time, we run the risk that cameras in combination with other technologies will turn our lives into open books to government scrutiny.

\textbf{B. THE CHILL ON FIRST AMENDMENT RIGHTS}

Chicago has a long history of unlawful political surveillance of its residents and visitors.\textsuperscript{62} From the 1920s through the 1970s, the Chicago Police Department’s notorious “Red Squad” spied on and maintained dossiers about thousands of law-abiding individuals and groups, even going as far as to infiltrate the meetings and memberships of political and civil rights organizations. The ACLU and many other groups sued, and eventually came to a settlement with the City. That agreement regulated the City's collection of information about people based on their First Amendment activity, such as joining a political or civil rights group, or marching in a parade. Unfortunately, these regulations were lightened in 2001, and lifted in 2009.

Today, the City allows its police officers to collect information about a person’s lawful political or social activities, without any meaningful restraint. For example, the City allows police to film activities protected by the First Amendment – even marching in a political demonstration – so long as the police believe they comply
with the City's nebulous requirement of a “proper law enforcement purpose.” Given the widespread and sophisticated nature of the cameras, and the City's history of abusive political spying, many people in Chicago may be afraid to join in First Amendment activity in public places, because they fear they will be watched, and that their expressive activity will be documented in government files.

C. EMPLOYEE MISUSE IN OTHER CITIES

It is not publicly known whether Chicago police or other City employees have been accused of abusing the cameras, because the City refused to disclose this information to the ACLU pursuant to FOIA. Camera abuses have occurred in other cities, including: (1) improper focus on other people's bodies; (2) improper disclosure of sensitive images; and (3) discriminatory surveillance.

1. Improper focus on a person's body

In England, which has a very large number of cameras, one study reviewed 592 hours of camera monitoring by government officials, which involved targeted surveillance of 888 civilians. The researchers found that 10% of surveillance of women which lasted for more than one minute, and 15% of surveillance of women for shorter periods, was voyeuristic.

In 2001, a journalist described the atmosphere in a camera control room in Great Britain:

During my time in the control room, from 9 p.m. to midnight, I experienced firsthand a phenomenon that critics of CCTV [closed circuit television] surveillance have often described: when you put a group of bored, unsupervised men in front of live video screens and allow them to zoom in on whatever happens to catch their eyes, they tend to spend a fair amount of time leering at women.

He also observed that in one station, camera operators printed pictures of women with large breasts, and taped them to the wall. In 2007, a police supervisor in Worcester, England, was suspended after improperly manipulating surveillance cameras to focus in on women's breasts and buttocks.

There have been reports of similar camera abuses by government officials in the United States. In 2005, a San Francisco police officer was suspended for nine months after he used the airport's monitoring equipment for three hours to zoom in on women's breasts and buttocks. In 2003, an Alabama state trooper used a normally stationary traffic camera to zoom in on several women's breasts and buttocks. In 2004, a former NYPD officer alleged that other officers used city cameras to ogle women. Cameras in the United States have similarly been abused by private security officers.
2. Improper release of video

A government video surveillance camera monitoring public housing in the Bronx recorded a young man committing suicide in a public area. A police officer emailed this recording to his friend. The recording later was posted on a website dedicated to pornography. Other government officials also have improperly disclosed sensitive images captured by video surveillance cameras.

3. Racial disparate impact

There is an inherent danger that conscious or unconscious bias will cause some government officials who use surveillance cameras to focus disproportionately on racial minorities. Indeed, in Chicago’s training DVD for officers using the surveillance cameras, only racial minorities are presented as the targets of surveillance.

In the aforementioned study in England of 592 hours of camera monitoring, the researchers found that black people were between 1.5 and 2.5 times more likely to be watched than one would expect from their presence in the population being monitored. Further, black people were disproportionately placed under such surveillance for “no obvious reason” – 68% of all surveillance of blacks, compared to 35% of all surveillance of whites. Thus, the disparately high surveillance of black people was not based on the observed behavior of black people. Indeed, while black people accounted for 32% of targeted surveillance, they accounted for only 9% of those arrested.

D. OPPORTUNITY COSTS

The City of Chicago has declined to state the total cost of its camera network. However, publicly available information shows the expenditure of at least $60 million on Chicago’s cameras. For example:

- The Chicago Police Department’s POD cameras probably cost at least $10 million to install. There are 1,260 PODs, according to a City website. Each first generation POD cost $22,000 (including a $7,000 control panel), and each fourth generation POD cost $6,000.

- The Chicago Transit Authority is spending $43 million on its cameras.


- Chicago’s Navy Pier spent $4.2 million on its camera system in 2009.
Meanwhile, the ranks of Chicago police officers on the street are dropping due to a lack of funding.\textsuperscript{83} There will soon be 1,000 vacancies in the Chicago police force, not including the 1,000 officers out on leave.\textsuperscript{84} In addition, the City has dramatically cut its investment in community policing, known as “CAPS” or the Chicago Alternative Policing Strategy. In August 2009, the CPD stopped paying officers overtime to attend beat meetings or CAPS events when they were off shift.\textsuperscript{85} The CPD also cut the CAPS budget from $6.6 million to $5.3 million, and reduced the number of CAPS employees from 72 to 54.

Yet many violent crimes are solved by old-fashioned community input, which is fostered by community policing, and not by cutting-edge technology. In 2008, ten-year-old Nequiel Fowler was shot in an alley while she was tying her blind sister’s shoes.\textsuperscript{87} The shooters were outside the range of several cameras located near the scene. According to Alderman John Pope (10th Ward), “Information from neighbors was the key.”\textsuperscript{88}

Likewise, in New York City’s Times Square on May 1, 2010, community input – not that City’s expansive video surveillance camera network – provided the first tip about a suspicious car, later found to contain a homemade bomb. The police were informed by two sidewalk vendors, who had established relationships with the local police.\textsuperscript{89} One of the two vendors later explained: “we know the cops here by first name – we have their cell numbers.”\textsuperscript{90}

Moreover, studies have shown that improved street lighting reduces crime.\textsuperscript{91} In comparison, most studies on the effectiveness of cameras don’t show a decrease in most crimes. \textit{See infra} Part IV. Recently, a community group in the Rogers Park neighborhood of Chicago, charged by the local Alderman with creating proposals for spending certain government funds in the ward, voted that the money be spent on lighting instead of cameras.\textsuperscript{92}

In sum, every dollar that Chicago spends on cameras is a dollar that cannot be spent on more effective safety measures, like police manpower, community policing, and improved street lighting.
In light of the civil rights and civil liberties concerns discussed above – the invasion of privacy, the chilling of speech and assembly, the voyeuristic use, and the racial disparate impact – the ACLU opposes the unreviewed expansion of Chicago’s camera system, and the absence of critical privacy regulations, even if the cameras were proven to have some meaningful effect on crime. Some law enforcement techniques are too costly in terms of individual liberties, even if they provide some measure of effectiveness.

In any event, numerous studies by independent scholars have concluded that video surveillance cameras in fact do not reduce violent crime, and only in certain circumstances reduce property crime (such as in parking garages). For example:

- A 2008 study of Los Angeles’ cameras, by the University of Southern California (“USC”), found no statistically significant impact on violent crime, property crime, or quality of life crime (such as prostitution or public drunkenness).

- A 2009 study of San Francisco’s cameras, by the University of California at Berkeley, found no statistically significant impact on violent crime, drug crime, or quality of life crime, and some impact on property crime.

- A 2005 review of 13 studies in England found no statistically significant impact on violent crime, and a statistically significant reduction in property crime in only two of the thirteen locations studied, one of which was a parking lot.

- A 2008 review by USC of 44 studies in the United States and abroad concluded that none of the domestic studies found a statistically significant impact on crime, and that any impact found in foreign studies was limited to property crime.

Thus, John Firman of the International Association of Chiefs of Police stated in 2006: “While we think cameras are effective when they are used for investigation, arrest and prosecution, whether it works for prevention is difficult to measure. . . . There’s too many variables.”

Nonetheless, the City of Chicago repeatedly has claimed that its camera network effectively deters all manner of crimes. However, when the ACLU pursuant to FOIA probed the City’s effectiveness assertions, the City was unable to locate any records that supported its specific public assertions of camera effectiveness. Thus, it is impossible to evaluate whether the City’s conclusory and self-serving
assertions are statistically sound (including whether there were fair control
groups and a sufficiently large sample), and whether the cameras merely displaced
crime to adjacent areas.

The City did disclose to the ACLU three studies, previously unpublished, purporting
to show that the CPD’s POD cameras reduce crime.99 Two were internal reports.
All three have serious methodological flaws. First, none account for the likelihood
that a reduction in crime near the cameras was caused by police actions other
than the cameras. Yet the City’s camera policies themselves mandate new law
enforcement initiatives near the cameras when installed.100 Second, two of the
studies do not consider that cameras simply displace crime to adjacent corners,
rather than reduce crime overall.101 Indeed, one of these studies conceded that it
“did not examine whether crime was displaced to other areas or indoors due to
the placement of the POD.”102 Third, one study, faced with a data set showing no
statistically significant decrease in crime within eight weeks of camera installation,
made the methodologically dubious decision to drop two so-called “outlier” cameras,
thereby creating the appearance of a decrease in crime.103 Further, the City would
not release the studies’ underlying electronic data, preventing an independent
review of the supposed findings.*

Finally, the City asserts that its camera network led to 4,500 arrests in the 4 years
from 2006 through May 2010.104 This is less than 1% of the 646,255 CPD arrests in
just the three years from 2006 through 2008.105 Further, it appears that most of the
10,000 cameras in the City’s network have not yielded an arrest. Yet each camera
costs tens of thousands of dollars to install, maintain, and monitor. Moreover,
while cameras have helped to identify suspects in some terrorism cases, like the
2005 London bombing,106 the cameras did not prevent the attacks.

In sum, any marginal benefit of Chicago’s cameras is far outweighed by the
substantial costs discussed above. See supra Part III.

* The Urban Institute is currently conducting a study of the effectiveness of Chicago’s cameras. Preliminary
reports suggest that the Urban Institute found that cameras reduced crime in the Humboldt Park neighborhood,
Neither the full report nor the underlying data are yet public. At this point, the unreleased work of the Urban
Institute sheds little light.
human observation, and are highly invasive of privacy. To address this issue, New York City prohibits facial recognition technology in all circumstances. Also, Pittsburgh requires probable cause for facial recognition and automatic tracking, and the Model Legislation recommends that approach. Notably, Judges Ginsburg and Kozinski would require a judicial warrant before allowing police to secretly place a GPS tracking device on someone’s car for an extended period.

Accordingly, the City of Chicago should adopt a rule requiring probable cause either of criminal activity or of a threat to public safety, before using the camera system to facially recognize or automatically track a particular individual.

3. Recording private areas

The City of Chicago’s cameras have the technological capacity to be aimed into private places, like homes, and to magnify the people, things, and occurrences therein. The CPD’s training DVD states that cameras should not be directed towards private places. However, to the best of the ACLU’s knowledge, this prohibition has not been formally incorporated in any CPD or OEMC written policy.

Government officials cannot lawfully aim sensory enhancing technologies into private places in the absence of individualized suspicion. In other communities, there have been reports of law enforcement personnel improperly aiming cameras into private residences. To prevent such abuse, other cities have adopted explicit written policies on this point, including Denver, New York City, Pittsburgh, Salt Lake City, San Francisco, and Washington, DC. Likewise, a police officer or supervisor in Chicago who seeks guidance on this question should be able to find the answer in a formal written policy.

Accordingly, the City of Chicago should adopt a formal, written rule prohibiting the use of cameras to record activities taking place in private areas, such as a private residence or business.

4. Retention of camera images

The City of Chicago’s camera system has the technological capacity to indefinitely retain for lengthy periods of time a virtually unlimited quantity of captured images of persons going about their business in public places. The OEMC apparently has no current policy limiting the duration of image retention. As to the CPD’s POD cameras, camera images are destroyed within 3 or 15 days (depending upon the type of camera), unless an officer requests retrieval. This CPD policy provides no criminal predicate to limit officer discretion to retrieve and retain camera images, and no supervisory review of the exercise of that discretion.

Camera images document sensitive information about members of the public,
including who a person has been with, and where a person has been (such as a psychiatrist’s office, a political demonstration, or a reproductive health care facility). There is the inherent danger of accidental or wrongful disclosure of retained camera images capturing such sensitive information. Thus, the images should be destroyed after a brief period, unless there is sufficient cause to retain them. The Model Legislation recommends a reasonable suspicion standard, determined by a supervisor, for retaining camera images.\textsuperscript{121}

Accordingly, the City of Chicago should adopt a rule providing that camera images will not be retained beyond a short period of time (such as 7 days), unless a supervisor determines that (1) there is reasonable suspicion that the images in question contain evidence of criminal activity, or (2) the images are relevant to an ongoing investigation or pending criminal trial.

5. Dissemination of camera images

The City of Chicago’s camera system has the technological capacity to broadly disseminate captured images of persons in public places. To the best of the ACLU’s knowledge, the City of Chicago has not adopted a limit on such dissemination.

Again, camera images document sensitive information. In other communities, there have been reports of law enforcement personnel improperly disclosing camera images. See supra Part III(C). To address this danger, other cities have adopted restraints on disclosing camera images, including New York City, Pittsburgh, and San Francisco, and the Model Legislation recommends such a policy.\textsuperscript{122}

Accordingly, the City of Chicago should adopt a rule prohibiting dissemination of camera images to third parties, except that a supervisor can disseminate images:

a) To another governmental agency, if (1) there is reasonable suspicion that the images in question contain evidence of criminal activity, or (2) the images are relevant to an ongoing investigation or pending criminal trial.

b) To a criminal defendant, if the images in question are related to the pending charges.

6. Periodic audits

A CPD policy requires collection of camera effectiveness data, and review of that data by district commanders, the deputy superintendent for crime strategy, and other CPD executives.\textsuperscript{123} However, to the best of the ACLU’s knowledge, there is no similar OEMC policy, no periodic audits of camera effectiveness and other camera issues, and no disclosure of such audits and underlying information to the general public.
Camera audits and public disclosures would advance a healthy public dialogue regarding the cameras. Effectiveness data is already being collected, so its public disclosure should impose little new administrative cost. Other communities, including New York and Washington, DC, mandate periodic audits of camera effectiveness and/or compliance with policy,\textsuperscript{124} and provide public access to information in the audits.\textsuperscript{125} The Model Legislation recommends both actions.\textsuperscript{126}

Accordingly, Chicago should adopt a rule requiring:

a) An annual audit of the City’s camera systems to identify and evaluate: (1) the effectiveness of the cameras at reducing crime or achieving some other legitimate government purpose; (2) the impact of the cameras on the privacy and other civil rights and civil liberties of the general public; and (3) any misuse of the cameras, and the corrective action taken.

b) Public disclosure of such audits, including all electronic statistical data used to evaluate camera effectiveness.

\textbf{7. Public notice}

The CPD publicly discloses the location of many of its cameras, by means of its Internet website, and by flashing lights on many of its cameras. However, to the best of the ACLU’s knowledge, there is no public disclosure of the location of most of the other cameras linked to the City’s camera network. Moreover, the public generally does not have notice and an opportunity to be heard prior to the installation of new cameras.
Members of the public should have input regarding installation of new cameras in their own neighborhoods. Thus, other communities require community notification prior to installation, and the Model Legislation recommends this policy. Further, members of the public should have notice of camera locations, so they can choose to protect their privacy by refraining from activities they do not want other people to watch while in the vicinity of a camera. Thus, other communities mandate disclosure of camera locations, by means of signs and/or the Internet, and the Model Legislation recommends this policy.

Accordingly, the City of Chicago should adopt a rule requiring:

a) Public notice and an opportunity to be heard prior to installation of any new cameras.

b) Public notice of the location of all cameras linked to the City’s camera network.

8. Enforcement

To the best of the ACLU’s knowledge, the CPD and the OEMC have no specific rules regarding enforcement of camera privacy policies. Enforcement is necessary to ensure that camera privacy policies have teeth. Pittsburgh’s camera policy mandates investigation of alleged camera misuse, and punishment of camera misuse, and the Model Legislation recommends this policy.

Accordingly, the City of Chicago should adopt a rule requiring:

a) Supervisory review of camera operators to ensure their compliance with the rules herein, and any other rules regarding the City’s cameras that protect the privacy and other civil rights and civil liberties of the general public.

b) Investigation of all camera operators alleged to have violated such rules.

c) Discipline of all camera operators found to have violated such rules.

9. Linked private cameras

The City of Chicago’s camera system is linked to many privately owned cameras. See supra Part I(A). The City’s use of these private cameras should be subject to the City’s camera privacy policies. However, the City’s contracts regarding access to private cameras do not specifically provide that the City’s camera privacy policies govern the City’s use of private cameras. Other communities that network with private cameras have adopted such a rule, and the Model Legislation recommends this policy.
Accordingly, the City of Chicago should adopt a rule providing that all private cameras that are linked into the City’s camera network are subject to the rules herein, and any other rules regarding the City’s cameras that protect the privacy and other civil rights and civil liberties of the general public.

10. Traffic enforcement cameras

In addition to the law enforcement and public safety surveillance cameras discussed throughout this report, the City of Chicago has also installed a system of traffic enforcement cameras. As far as the ACLU knows, the City has not promulgated rules that protect the privacy of motorists photographed by these cameras. The State of Washington has enacted a statute with appropriate privacy rules.

Accordingly, with respect to these traffic cameras, the City of Chicago should adopt rules providing that:

a) Pictures may be taken only while a traffic infraction is occurring.

b) Pictures may be taken only of the vehicle and license plate, and not of the face of the motorist or passengers.

c) Pictures may be used only for the enforcement of a traffic infraction.

d) Pictures shall be destroyed upon completion of the enforcement of a traffic infraction.

e) Intersections with traffic enforcement cameras shall be clearly marked.
The ACLU of Illinois sought this information in letters of July 28, 2008; October 21, 2008; December 17, 2008; and July 10, 2009.

Don Babwin, Cameras Make Chicago Most Closely Watched U.S. City, ASSOC. PRESS, April 6, 2010.


Prior to 2003, video surveillance conducted by the City of Chicago was done with older, VCR-based camera systems, in which tapes had to be frequently changed, and each camera was connected to the system with a separate cable. Jessica Bennett, Big Brother's Big Business, NEWSWEEK, Oct. 15, 2007, at http://www.newsweek.com/id/47242/output/print.


Chicago’s Report on PODs, supra note 6, at 2.

Id. at 4.

Id.


New Security Cameras Coming to All CTA Rail Stations, supra note 5.

All CTA stations to have cameras by end of May, CHICAGO BREAKING NEWS, May 21, 2010; Travis Truitt, Chicago to Have Security Cameras in Every CTA Train Station, NPR, May 22, 2010, at http://www.wbez.


Id.


Mayor’s Office, Mayor Daley Unveils New Emergency Communications Van (Sept. 6, 2006), available at http://egov.cityofchicago.org/city/webportal/portalContentItemAction.do?BV_SessionID=6409899417074.1279824959&contentType=IMAGES&contentOID=53694432&contenTypeName=COC_EDITORIAL&topChannelName=Dept&blockName=Mayors+Office/September/1+Want+To&context=dept&channelId=0&programId=0&entityName=Mayors+Office&dep tMainCategoryOID=-536882034.

Chicago has entered contracts with at least eleven private companies: the Banc One Building, CB Richard Ellis, Chicago Board Options Exchange, Inc., Chicago Mercantile Exchange, Inc., DePaul University, Ema Group, Health Care Service Corporation, Holsten Management Corporation, Kenmore Condominium Association, Northern Trust, and Wacker LLC. See contracts attached to letter from Chicago to ACLU (Jan. 20, 2010) (on file with ACLU). See also Karen Ann Cullotta, Chicago Links Street Cameras to Its 911 Network, N.Y. TIMES, Feb. 21, 2009, at A10; Daniel Schorn, We’re Watching: How Chicago Authorities Keep an Eye on the City, CBS, Sept. 6, 2006; City of Chicago, Link Your Cameras into OEMC.

Contracts attached to letter from Chicago to ACLU (Jan. 20, 2010) (on file with ACLU). See also Link Your Cameras into OEMC, supra note 20.

Link Your Cameras into OEMC, supra note 20.

Schorn, supra note 20; Chicago’s Camera Network, supra note 16.


Brockman, supra note 5.

Mayor’s Office, Mayor Daley Announces Major Upgrade to Chicago’s 911 System (Feb. 19, 2009); Mayor’s Office, Mayor Daley Unveils New City Operations Center (Nov. 16, 2004).

Noah Isackson, Can Cameras Replace Cops?, CHI. MAGAZINE, March 2009, at 62; Mayor Daley Unveils New City Operations Center, supra note 26; Operation Disruption PODs: Procedures & Policies (police training

28Chicago’s Report on PODs, supra note 6, at 3-4.


32Chicago’s Report on PODs, supra note 6, at 3-4.

33Lucas D. Introna & Helen Nissenbaum, Facial Recognition Technology: A Survey of Policy and Implementation Issues (2009), at 11, 15-17, at http://www.nyu.edu/ccpr/pubs/Niss_04.08.09.pdf. This report was funded by the U.S. D.H.S., and administered through the Center for Catastrophe Preparedness at New York University.

34All CTA Stations to Have Cameras by End of May, supra note 13; “Facial Recognition” Coming to CTA, supra note 13.

35All CTA Stations to Have Cameras by End of May, supra note 13.


37Babwin, supra note 2.

38Id.

39Fran Spielman, Chicago Mayor Wants Cameras on Every Corner, CHI. SUN-TIMES, Mar. 14, 2009 [hereinafter “Chicago Mayor Wants Cameras on Every Corner”].


41Chicago Mayor Wants Cameras on Every Corner, supra note 39.

42Isackson, supra note 27, at 63.


44Id. at § 2-84-053.

45Chicago’s Report on PODs, supra note 6, at 7.


47FOIA disclosures attached to Letter from Cicero to ACLU (April 16, 2009) (on file with ACLU).
40 FOIA disclosures attached to Letter from Columbia to ACLU (April 4, 2009) (on file with ACLU).

41 Rebecca Cohen, Evanston’s surveillance camera plan stirs mixed reactions, DAILY NORTHWESTERN, May 26, 2010.


43 FOIA disclosures attached to Letter from Peoria to ACLU (Apr. 20, 2009) (on file with ACLU).


45 Letter and FOIA disclosures to ACLU (April 28, 2009) (on file with ACLU).


47 Press Release, Springfield Police Department Activates Downtown Surveillance Cameras (Jan. 18, 2006); Disclosures attached to letter to ACLU (March 30, 2009) (on file with ACLU).


49 Kinzer, supra note 5.

50 United States v. Maynard, 615 F.3d 544, 562 (D.C. Cir. 2010), cert. denied 2010 WL 4156203 (Nov. 29, 2010).

51 United States v. Pineda-Moreno, 617 F.3d 1120, 1126 (9th Cir. 2010) (Kozinski, J., dissenting from the denial of rehearing en banc).

52 United States v. Garcia, 474 F.3d 994, 997 (7th Cir. 2007); United States v. Pineda-Moreno, 591 F.3d 1212, 1216-17 (9th Cir. 2010); United States v. Marquez, 605 F.3d 604, 609 (8th Cir. 2010).

53 Mayor Daley Unveils New City Operations Center, supra note 26.

54 See generally Alliance to End Repression v. City of Chicago, 237 F.3d 799, 801 (7th Cir. 2001).

55 CPD General Order 02-10-01B (Jan. 16, 2006) at Part VIII(E).


57 Id. at 174.


Id.

In 2008, a school technician in Indiana was arrested after he forwarded to his home computer images of students taken by a school video surveillance camera. Vids of Students on Arrested Tech’s Computer, 6 NEWS: THE INDY CHANNEL, Feb. 15, 2008. In 2007, a video surveillance camera in a Washington high school captured two girls kissing and holding hands. Brent Champaco, Cameras Catch Kiss, Raising Questions, THE NEWS TRIBUNE, Apr. 26, 2007. When the dean of students shared video of the incident with one of the girl’s parents, the school district investigated the dean for any pattern of inappropriate camera use, and eventually modified its policies relating to the use of school cameras. Id.

See Police Training Video on PODs, supra note 27, at 11:15 to 11:50.

English Camera Study of 1999, supra note 64, at 162-64, 172.

See supra note 7.


New Security Cameras Coming to All CTA Rail Stations, supra note 5.


John Byrne, Daley says 100 more officers needed, but no money, CHI. TRIB., Clout Street, July 20, 2010; Hal Dardick, New hires in ’11 won’t make up for departing cops, city concedes, CHI. TRIB., Nov. 1, 2010.

Id.

Isackson, supra note 27, at 89.

Id.

Id. at 62.

Id.

Id.


Aundreia Cameron et al., Measuring the Effects of Video Surveillance on Crime in Los Angeles, at 29-30 (University of Southern California, May 5, 2008) [hereinafter “USC Study”].


USC Study, supra note 93, at 14-16.


Chicago’s Report on PODs, supra note 6, at 2; Rob Johnson, City’s Crime-Fighting Cameras Get Mixed Reviews, CBS NEWS, Nov. 20, 2006; Andrew Stern, Who Watches the Watchers in Surveillance Society? REUTERS NEWS (Feb. 5, 2007); New Security Cameras Coming to All CTA Rail Stations, supra note 5.


Specifically, the CPD’s “POD placement request” form instructs: “list all other resources you are going to use to ensure that the 330 foot area covered by the POD will resolve the specific problem/crime.” It then provides a checklist of such resources, including “directed missions,” and community policing programs. Likewise, the CPD’s “POD camera information” form requires a statement of “what additional city/police resources will be used to ensure crime reduction after POD camera removal.” See “POD Placement Request,” CPD form #21.965 (Oct. 2005); “POD Camera Information,” CPD form #21.966 (Oct. 2005).


Chu report, supra note 99, at 5, 7, 54, 64.


CPD General Order 02-10-01B (Jan. 16, 2006) at Part VIII(E).

OEMC Standard Operating Procedure 08-002 (Oct. 28, 2008) at Part II.

PITTSBURGH, PA., CODE OF ORDINANCES, § 681.02(e)(i), PRIVACY POLICY FOR PUBLIC SECURITY CAMERA SYSTEMS [hereinafter “Pittsburgh Policy”] (prohibiting PTZ “targeting” without reasonable suspicion); id. at § 680.02 (defining “PTZ” to mean “manipulating a camera to view areas outside the original image frame or measurably increase the resolution of the images rendered”). See also Model Legislation, supra note 107, at §§ 103, 311(a) (same).

D.C., CODE OF MUNICIPAL REG., tit. 24, ch. 25, METROPOLITAN POLICE DEPARTMENT USE OF CLOSED CIRCUIT TELEVISION [hereinafter “D.C. Policy”], at § 2501.3 (prohibiting use of cameras to infringe on First Amendment rights); id. at § 2504.4 (prohibiting use of cameras to focus on hand bills distributed or carried pursuant to First Amendment rights); SALT LAKE CITY POLICE DEPARTMENT, UTAH, PUBLIC SPACE CAMERAS POLICY (Feb. 18, 2009) [hereinafter “Salt Lake City Policy”], at 4, Restriction #3 (prohibiting use of cameras to monitor persons based solely upon their political or religious beliefs, their exercise of rights to speech or assembly, or the content or viewpoint of their speech); id. at Restriction #4 (prohibiting use of cameras to “actively monitor” free speech activity, except to assist in crowd control, to respond to emergencies, and where there is “reasonable cause” to believe that unlawful activity will occur or is occurring); id. at 1, Definition #3 (defining “active monitoring” as using PTZ in live time “to focus” on a particular person).

DENVER POLICE DEPARTMENT, COLO., OPERATIONS MANUAL, CLOSED CIRCUIT TELEVISION POLICY (revised Jan. 2009) [hereinafter “Denver Policy”], at § 119.01(2)(b) (prohibiting use of cameras based on identity characteristics such as race, unless investigating a crime committed by a person whose identity is known); Pittsburgh Policy, supra note 110, at § 681.02(e)(ii) (requiring promulgation of rules to prevent PTZ use that discriminates on the basis of race or the like). See also Model Legislation, supra note 107, at §§ 311(b) (same).

NYPD, N.Y., PUBLIC SECURITY PRIVACY GUIDELINES (effective Apr. 2, 2009) [hereinafter “NYC Policy”], Part III(C) (“Facial recognition technology is not utilized”).

Pittsburgh Policy, supra note 110, at §§ 681.02(a), (c). See also Model Legislation, supra note 107, at §§ 302–03, 307–10.
Maynard, 615 F.3d at 564; Pineda-Moreno, 617 F.3d at 1124-25.

Police Training Video on PODs, supra note 27, at 11:55 – 12:06.


Bill Morlin, Guard Accused of High-Tech Voyeurism, THE SPOKESMAN REVIEW, Aug. 7, 2007; Wallace, supra note 70.

Denver Policy, supra note 112, at § 119.01(2)(a); NYC Policy, supra note 113, at Part III(C); Pittsburgh Policy, supra note 110, at § 681.01(e); Salt Lake City Policy, supra note 111, at 1; S.F., CAL., MUNICIPAL CODE (June 22, 2006) [hereinafter “San Francisco Policy”] § 19.3; D.C. Policy, supra note 111, at § 2501.5.

CPD Department Special Order 05-12 (Oct. 19, 2005) at Part VII(B) & (C), as amended by CPD Department Special Order 05-12-B (Aug. 27, 2007) at Part II(C).

Model Legislation, supra note 107, at § 314(b)(1).

Pittsburgh Policy, supra note 110, at § 683.01(a) (prohibiting disclosure to third parties, except in the contexts below); id, at § 683.05 (exception for criminal defendants); § 683.06(b) (exception for civil litigation about police misconduct); id. at § 683.07(c)(3) (exception for other government agencies, if there is probable cause); San Francisco Policy, supra note 119, at § 19.3(a)-(c) (prohibiting disclosure to third parties, except for criminal defendants and prosecutors); § 19.6(d) (prohibiting disclosure to other government agencies, except pursuant to a court order); NYC Policy, supra note 113, at Part III(F) (prohibiting disclosure “except as required by law, subpoena, or other court process”). See also Model Legislation, supra note 107, at §§ 315, 320, 321, 325 (same as Pittsburgh).

CPD Special Order 05-12, “POD video surveillance program” (effective Oct. 20, 2005), at Parts IV(A) (4), IV(C)(5), IV(B)(3), V(B)(4), VI(A), VI(C)(1), VI(D); “POD placement request,” CPD form #21.965 (promulgated 10/05) (“All POD placements will be monitored for effectiveness by the Bureau of Crime Strategy and Effectiveness”); “POD camera information,” CPD form #21.966 (promulgated Oct. 2005) (“Must provide a statistical report indicating number of calls for service and incidents of arrest for the below listed periods,” i.e., “30 days, 60 days, 90 days”).

NYC Policy, supra note 113, at Part III(H); Pittsburgh Policy, supra note 110, at § 688.01(a)-(c); San Francisco Policy, supra note 119, at § 19.4(d); D.C. Policy, supra note 111, at §§ 2502.8, 2502.9, 2507.1, 2507.2, 2508.6, 2508.7.

Pittsburgh Policy, supra note 110, at § 688.01(c); D.C. Policy, supra note 111, at §§ 2502.8 – 2502.9.

Model Legislation, supra note 107, at §§ 213 & 216.

Denver Policy, supra note 112, at § 119.01(9)(c); San Francisco Policy, supra note 119, at §§ 19.4(b), 19.5(a)-(b); D.C. Policy, supra note 111, at §§ 2502.1 – 2502.4. See also Model Legislation, supra note 107, at §§ 205–07.

Denver Policy, supra note 112, at § 119.01(9)(b); NYC Policy, supra note 113, at Part III(C); Pittsburgh Policy, supra note 110, at § 686.01; San Francisco Policy, supra note 119, at § 19.5(c); D.C. Policy, supra note 111, at § 2502.7. See also Model Legislation, supra note 107, at § 332(a)–(b).

Pittsburgh Policy, supra note 110, at § 689.01. See also Model Legislation, supra note 107, at § 328(a).

Pittsburgh Policy, supra note 110, at § 686.02; D.C. Policy, supra note 111, at § 2501.9. See also Model Legislation, supra note 107, at § 333.

WASH. REV. CODE §§ 46.63.170(1)(d), (g), & (h).