



Being Watched

Embedding Ethics in Public Cameras

Building technical, legal, and social
approaches to maximize the trusted use of
public camera-generated video data

Technology & Information Policy Institute **& Good Systems**

Dr. Sharon Strover, Leo Cao

University of Texas at Austin

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Community Technology and Telecommunications Commission, Austin TX



Agenda



Project
Overview



Research
Approaches



Major Issues &
Questions



Preliminary
Conclusions



Next Steps

A multi -component research approach



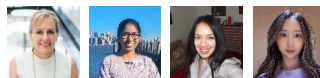
Understand conceptions of **privacy** among citizens, local journalists, and city officials



Identify open records law at State level and relevant data management issues

Build and test differential access models

Design smart city literacy training and initiate citizen engagement for traffic control



Research Approaches

- ❑ Rely on experts, city officials, ordinary people, and city units in order to understand variations in informational norms.
 - ❑ Delphi survey
 - ❑ interviews
 - ❑ **case studies** (e.g., Austin Public Library)
 - ❑ **focus groups**
 - ❑ public survey (fall 2023)
 - ❑ workshops

- ❑ Toward Differential Access & Civic Policies

Smart City Technologies



Austin Fire
Department

ShotSpotter
(not in use in Austin, as of
2021)



ShotSpotter

10/03 29°



CBSChicago.com



traffic cameras



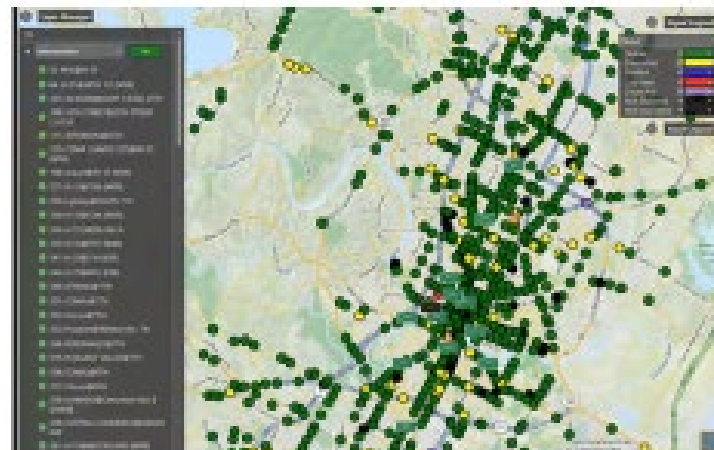
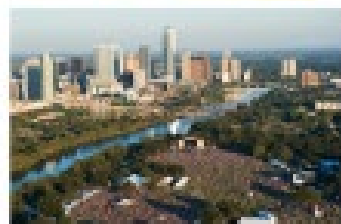
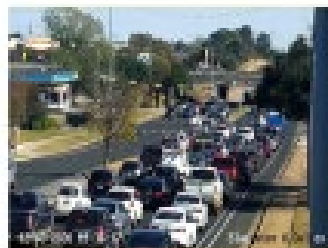
H.A.L.O.



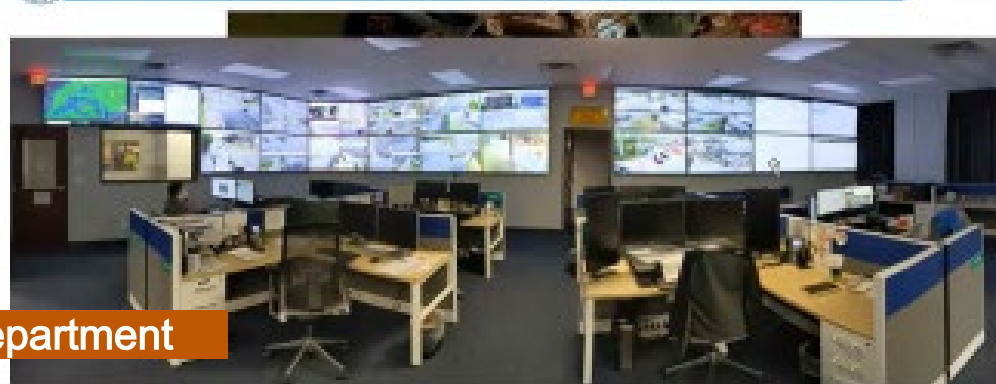
red light
cameras



CCTV cameras



Mobility Management Center Updates



Austin Transportation Department

STARTING WITH

CityIQ: Universal Intelligent Node for All Street Lights



Privacy, Contexts, and Publicness

- ❑ **contextual integrity** approach to examine norms& critical social values
 - ❑ actors: subjects, senders, receivers
 - ❑ types of information
 - ❑ transmission principles— consent, reciprocity, etc.
 - ❑ contexts

- ❑ e.g., *How do you think about camera-mounted drones used by fire departments when fighting fires?*
 - ❑ subject: drones, cameras
 - ❑ sender: fire department
 - ❑ receiver: residents, city units
 - ❑ types: images of people, buildings, etc.
 - ❑ transmission: purposes, benefits, goals

Research Methods

- ❑ qualitative
 - ❑ illuminate meanings, values & norms associated with public technology + privacy
- ❑ seven focus groups: identify benefits and concerns
 - ❑ seniors; students; EFF; civic activists; tech workers; tech executives; library users
- ❑ in-depth case study: Austin Public Library
 - ❑ tour of camera system infrastructure,
 - ❑ group & individual interviews w/ IT, Security, Frontline staff
- ❑ interviews with other City units:
 - ❑ Fire Department; Mobility (transportation); Chief Privacy Officer; Innovation Officer

Core Findings: Focus Groups

benefits & concerns

- ❑ security aspects of surveillance tech
 - ❑ younger people assume no privacy anyway; make sure tech is used for "good" purposes
 - ❑ complications with personal uses of cameras in quasi-public spaces (Ring networks)
 - ❑ perception of public cameras influenced by popular culture—unaware of other uses
- ❑ tech as not just a shortcut to dealing with bigger, complex problems...

attributes of data

- ❑ uncertain exchange: want transparency (data use, control) but question where data 'go'
- ❑ data governance needed at the local level
- ❑ data & algorithmic literacy

Core Findings: Focus Groups

contexts

- ❑ uncertainty of spatial qualities: What is public space anymore?
 - ❑ shared spaces such as apartment hallways
 - ❑ Ring cameras and other private systems see into public space
 - ❑ seeing the outside street from one's living spaces
 - ❑ drones complicate issue of publicness
- ❑ real scenarios where tech is countered: contextual significance
 - ❑ no one-size-fits-all approach
 - ❑ aware of trade offs between privacy and security
 - ❑ awareness of Austin specifically as an increasingly tech city

actors

- ❑ people's own identity/background figures into how they think about risks
 - ❑ e.g., undocumented status, ICE investigations, traffic accidents

Why the library?

Cameras in public libraries

- ❑ 450 cameras, half in one downtown building
- ❑ security & cameras "hiding in plain sight"?
- ❑ library as trusted, open, welcoming, and safe site



APL Website Privacy Statement

The Austin Public Library is committed to the protection of all Library customers' rights to privacy in the use of Library resources and discloses customer information to the customer only. Records of customer transactions are kept only as long as is required to collect administrative statistics and then are erased. Library records will only be disclosed under court order, subpoena, or warrant as outlined in the state statute, Texas Government Code, Section 552.124 and the surveillance provisions included in The USA PATRIOT ACT (Public Law 107-56).

April 2003

Also: Library Use Rules

1. Purpose. The Austin Public Library is supported by the taxes of the people of Austin who expect each of our facilities to be clean, comfortable, and safe. The library is intended for reading, studying, writing and listening to written or electronically transmitted materials, and attending library or community sponsored programs and meetings. To this end, the library has established these rules to protect the rights and safety of library customers, staff and volunteers, and to help preserve and protect the library's materials, equipment, facilities, and grounds ...

Research at the Library

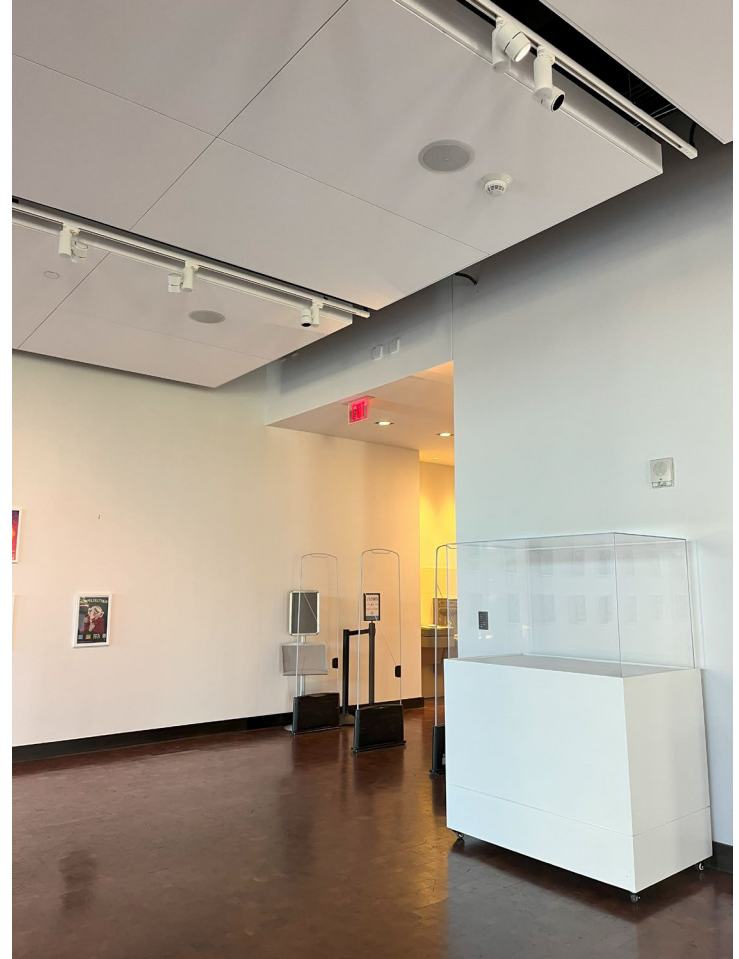
- ❑ observation & interviews
 - ❑ IT staff
 - ❑ Security staff
 - ❑ Frontline staff
 - ❑ Focus group with library users
- ❑ 7 additional focus groups investigating privacy norms with city technologies

library IT server closet



Research at the Library

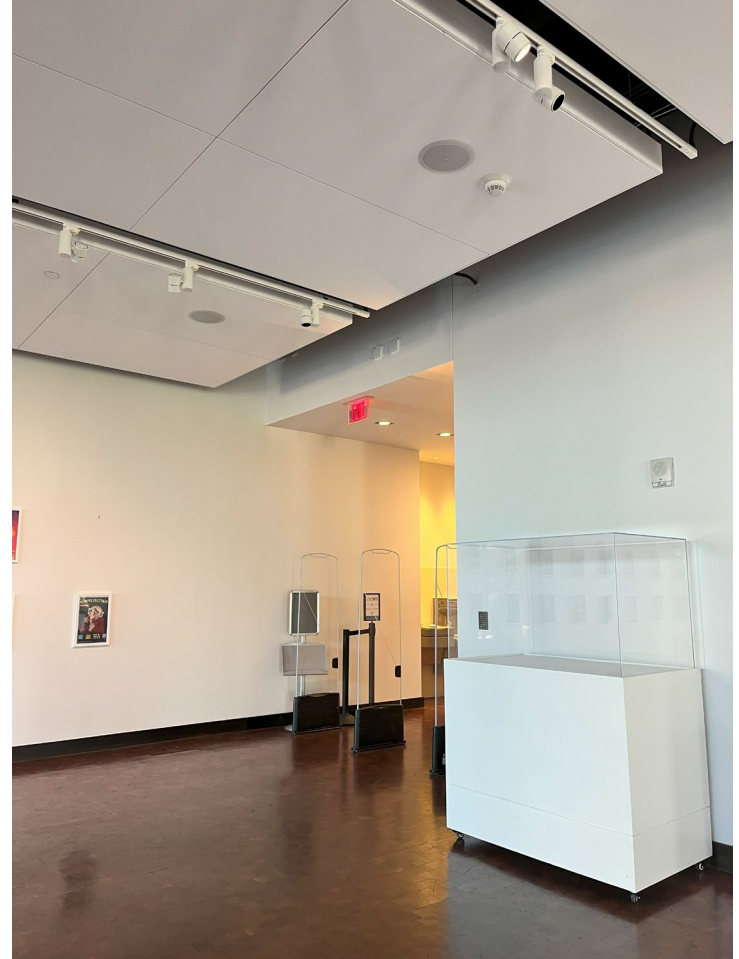
exhibit space with cameras and controlled entry with monitoring capabilities



Research at the Library

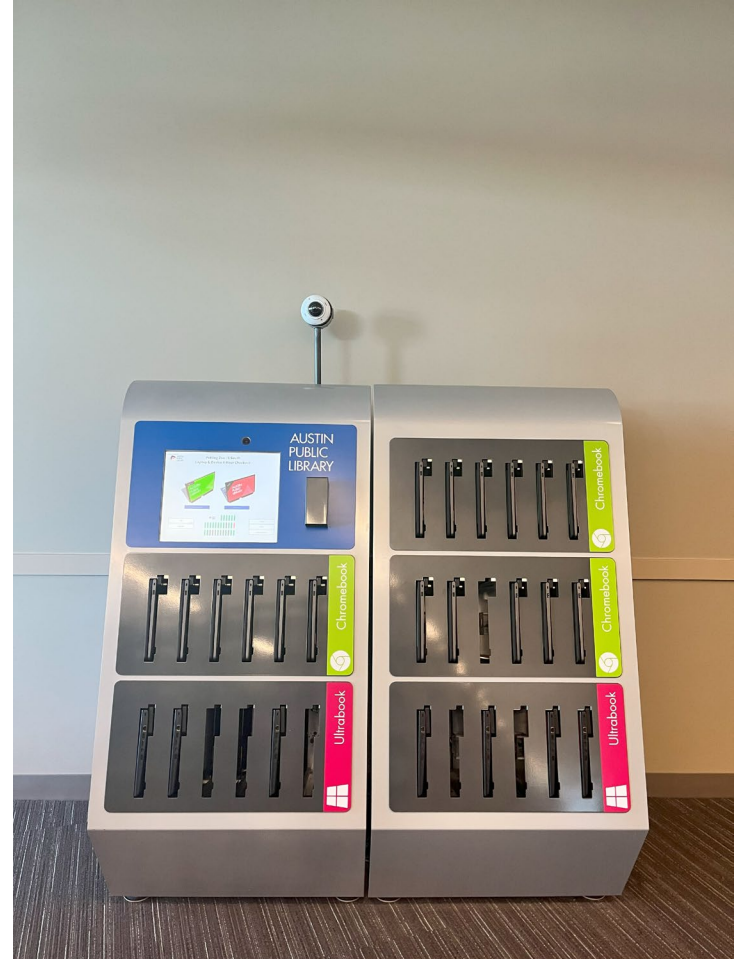
*"[Removing the gates] goes along the direction of where libraries are more **open**, **trusting** . Let's just trust everyone's going to do the right thing vs. everyone's evil trying to do bad things."*

exhibit space with cameras and controlled entry with monitoring capabilities



Research at the Library

laptop checkout kiosk with camera



Research at the Library

Library as open, and safe space

*“We are here primarily to make sure that everyone here gets a **good visit** , that they **feel safe** when they come here. We do **welcome** all walks of life. So, we want to make sure everybody's **treated fairly** . And our biggest way of doing that is to be patrolling, be visible.”*

Research at the Library

Tradeoff between security and discomfort

*"It seems like every day we're trying to **balance** between being welcoming and then ensuring safety and security. We're trying to find that **middle ground** , but as librarians we also feel like we need to be open for everybody and we want to welcome everybody but that goes against people. [...] It will make them uncomfortable."*

*"The library seems to be mostly **benign** with how it uses its cameras. I think their making them more obvious, would create too much of an **oppressive ambiance** . People come to the library to kind of chill out and relax and be in a **safe public space** . Feeling like somebody's watching them, even if they are, it might be like too much of like a **monkey on the back** ."*

- library user

Research at the Library

Property theft

*"[...] the thing that stops them the most is the fact that **it's a small space and we say hello to them** [...]. I don't think anybody's caring about the fact that there's cameras in there. It's more of **the presence of us being in there that stops things from happening** . It's also a strategy that we employ, [...] greeting people so that they know 'I'm looking at you, I see you, I'm watching you.'"*

*"[...] I like interacting with people a lot, and it has kind of like a **dual thing** of like **making people feel seen and reminding them** that they're like in a public space [...], if that makes sense."*

Research at the Library

Blurred lines between public and private spaces

*"It's also unclear, at least to me **where our 'property' ends** . Because the Special Events Center downstairs is technically a city space and not the library space, so it isn't clear where these **boundaries** are for where the cameras shouldn't be covering or where securities **jurisdiction** comes up against." - staff*

"I feel like I've just kind of personally, like, I just take it for granted or I've grown up with the expectation that, oh yes, like every detail is like sitting on a server somewhere something like yeah, [I] kind of forget about it." - library patron, on existence of camera data from library

Research at the Library

Cameras as reactive rather than proactive

*“We do our best internally to make sure that we have descriptions that can be shared and are recognizable because oftentimes we **don't see those photos till much later** whenever security gets around putting them onto the incident report or if they are added at all. So, I **don't think we really depend on photos** until it's a repeating incident.”*

*“Cameras **aren't really that much of a deterrent** to people who are gonna act out or steal or anything like that. It might be a **false sense of security** for us in a way. I always feel like well, at least we would be able to go back and identify the person, hopefully if something happens or if they come back again, but it **doesn't necessarily stop anything from happening** .”*

Research at the Library

Cameras as reactive rather than proactive

*“[...] if someone comes back enough that they have photos, oftentimes they're just **recognizable** to staff on site. So eventually the **photos don't matter anymore** . [...] Like 'this person's back'. This is what they look like because sometimes finding the relevant incident report takes much more time than describing what this person looks like.”*

*“[...] just like a lot of people have already said cameras are **more reactive than proactive** . I think it's more necessary to focus on how to end a situation in that moment as safely as possible rather than how to go back and see what happened.”*

Cameras in public libraries

Wearable communication devices for quick response staff use a simple communication device worn around the neck. This radio was used to alert, coordinate, “**rally the troops** ,” and to keep track of one another. It offers a way to knit workers together and a less intrusive way to know who was doing what where, built on the consent and knowledge of those wearing the devices.



Major issues & discussion

- ❑ cameras as reactive, not proactive
- ❑ straddling inclusivity and safety
- ❑ library surveillance as proxy solution for bigger issues (e.g., housing, identification)

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PITS®

"Finally we have a central,
searchable place for our
security incidents!"

— Jenny Noel, Mandel Public Library of
West Palm Beach, FL

Select References

- ❑ Crawford, K. (2016). Big urban data and shrinking civic space: The statistical city meets the simulated city. In Barney, D. et al. (Ed.), *The participatory condition in the digital age* (pp. 169-226). University of Minnesota Press.
- ❑ Mattern, S. (2021). *A city is not a computer: Other urban intelligences*. Princeton University Press.
- ❑ Klinenberg, E. (2018). *Palaces for the people: How social infrastructure can help fight inequality, polarization, and the decline of civic life*. Crown
- ❑ Greene, D. (2021). *The promise of access: Technology, inequality and the political economy of hope*. MIT Press.
- ❑ Scott, J. C. (1998). *Seeing like a state: How certain schemes to improve the human condition have failed*. Yale University Press.

