



# Being Watched

## Embedding Ethics in Public Cameras

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

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# 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

Build and test differential access models



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

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

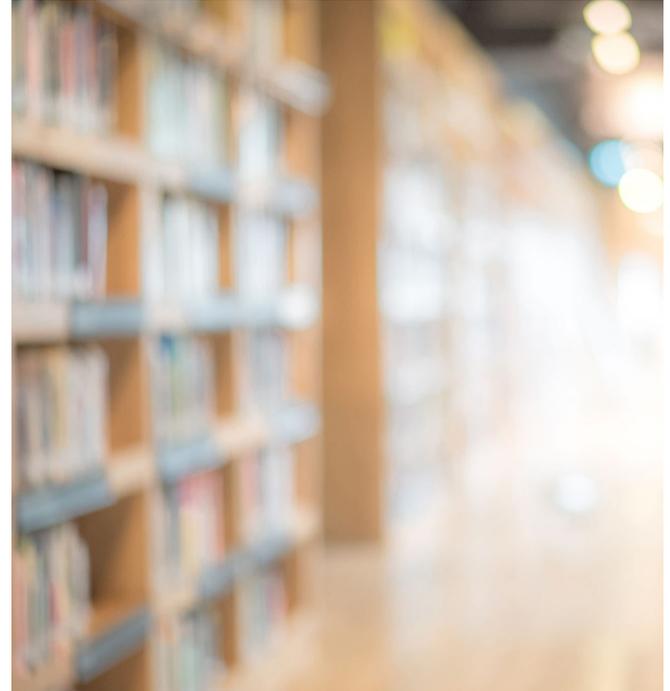


# Research Approaches

- ❑ Rely on experts, city officials, ordinary people, and city units in order to understand variations in informational norms.
  - ❑ Delphi survey
  - ❑ interviews
  - ❑ case studies
  - ❑ focus groups
  - ❑ public survey (fall 2023)
  - ❑ workshops
  
- ❑ Toward Differential Access & Civic Policies

# Translating ethics into city privacy practices

- ❑ Why this research?
  - ❑ "smart city" literature
- ❑ Broad use of monitoring technologies in cities
  - ❑ e.g., the drone group
  - ❑ little guidance, few ordinances in US cities
  - ❑ **but** dispersed guidelines/policies, Privacy Officer



# **Smart City Technologies**



**Austin Fire Department**

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



10:03 29°

**ShotSpotter**





**traffic cameras**



**H.A.L.O. cameras**



**red light cameras**



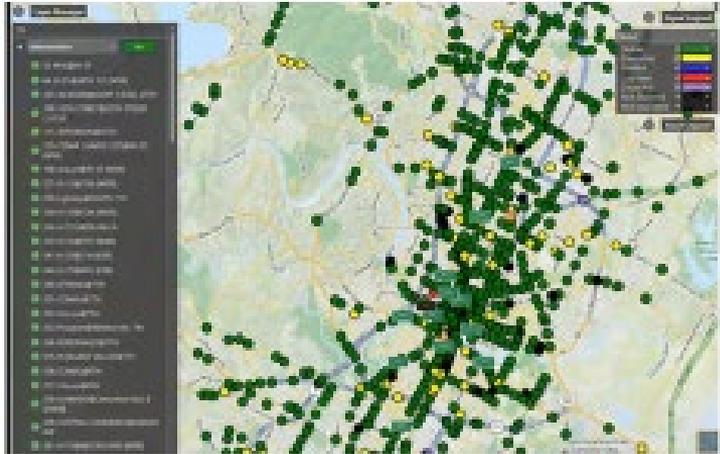
**CCTV cameras**

**CCTV**  
**WARNING**  
Images are being recorded  
for the purpose of crime  
prevention and detection  
This scheme is controlled by  
CCTV Camera Europe (UK) Ltd  
Tel 0870 770 5077

STARTING WITH

# CityIQ: Universal Intelligent Node for All Street Lights





## Mobility Management Center Updates



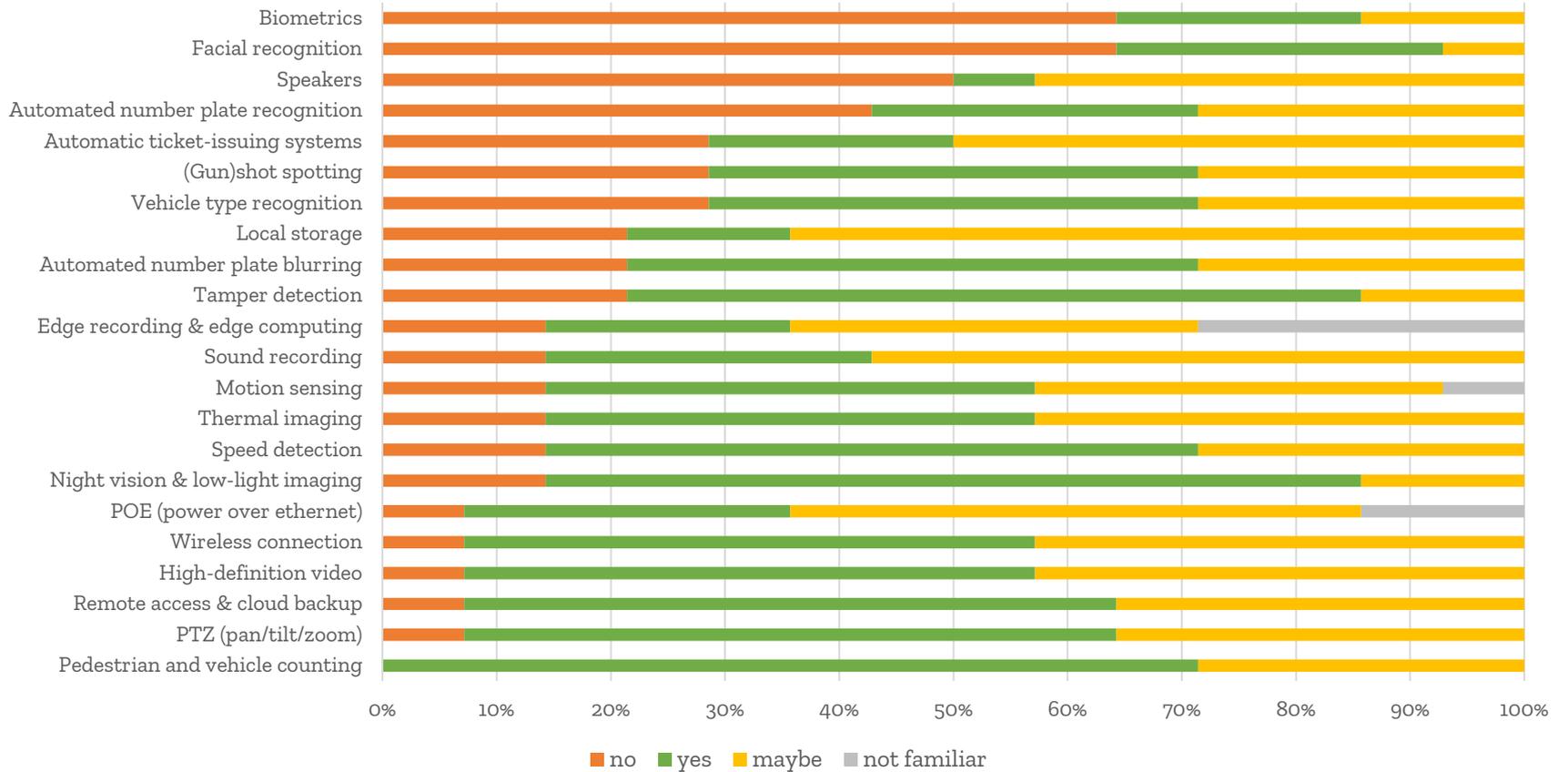
**Austin Transportation Department**



# Delphi survey: preliminary results

- ❑ primary risks of implementing public camera systems
  - ❑ abuse/misuse of data
  - ❑ privacy violation
  - ❑ police access
  - ❑ other: high costs, facial recognition technology, lack of public trust, racial inequity, damage to freedom of expression, cybersecurity, and other unintended consequences
  
- ❑ primary benefits of implementing public camera systems
  - ❑ increased safety
  - ❑ better situational awareness
  - ❑ improved emergency response
  - ❑ other: crime surveillance & deterrence, data collection, efficiency, traffic & crowd control, curbside management, and friction reduction between local governments and the public

## Should the following **technical capabilities** be included in public camera systems?



# Privacy 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 ...

## PITS®

"PITS® fulfills a need for incident tracking that many libraries have today. It provides consistency in reporting and the data to enhance opportunities for collaboration with city stakeholders to support staff and the public."

– *Englewood Public Library, CO*

# Translating ethics into city privacy practices

## **research framework**

- ❑ ethics, privacy

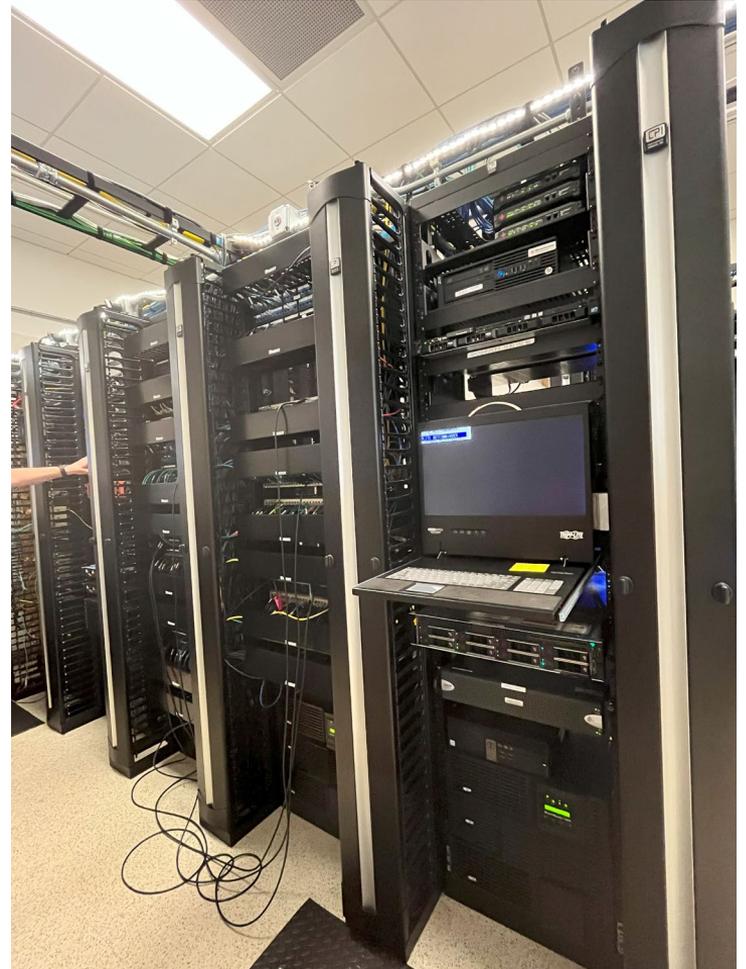
## **the library site**

- ❑ How do the physical spaces & communal engagement goals "work" with the cameras?
- ❑ What are workers' and users' privacy expectations and values?

# Research at the Library

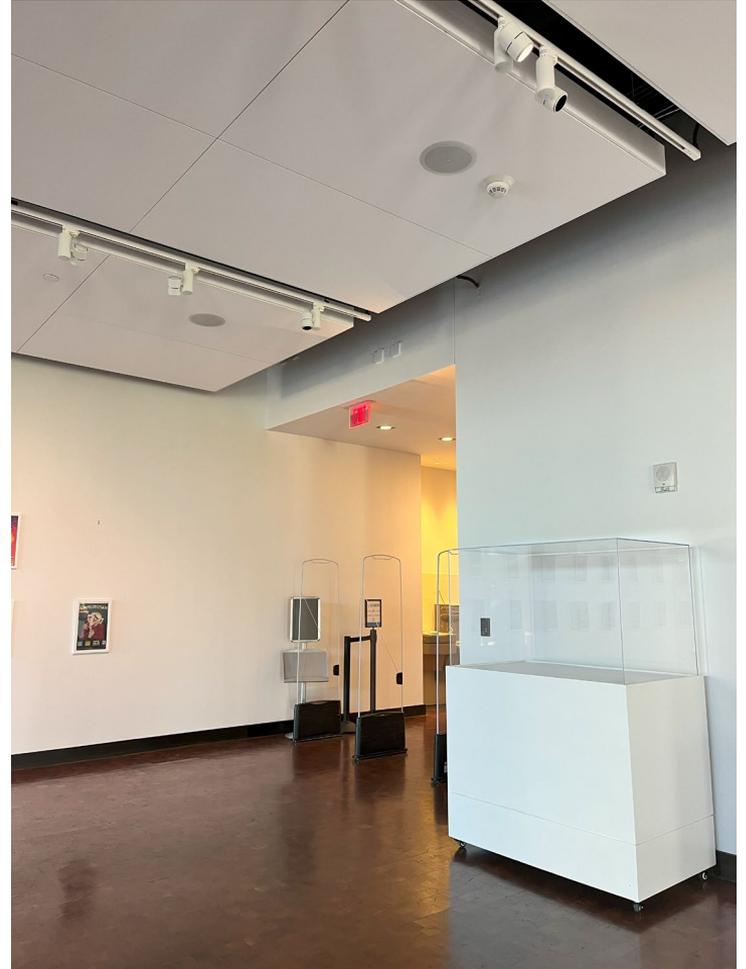
- ❑ observation & interviews
  - ❑ IT staff
  - ❑ Security staff
  - ❑ Frontline staff
  - ❑ Focus group with library users
- ❑ 6 additional focus groups investigating privacy norms with city technologies

library IT server closet



# Research at the Library

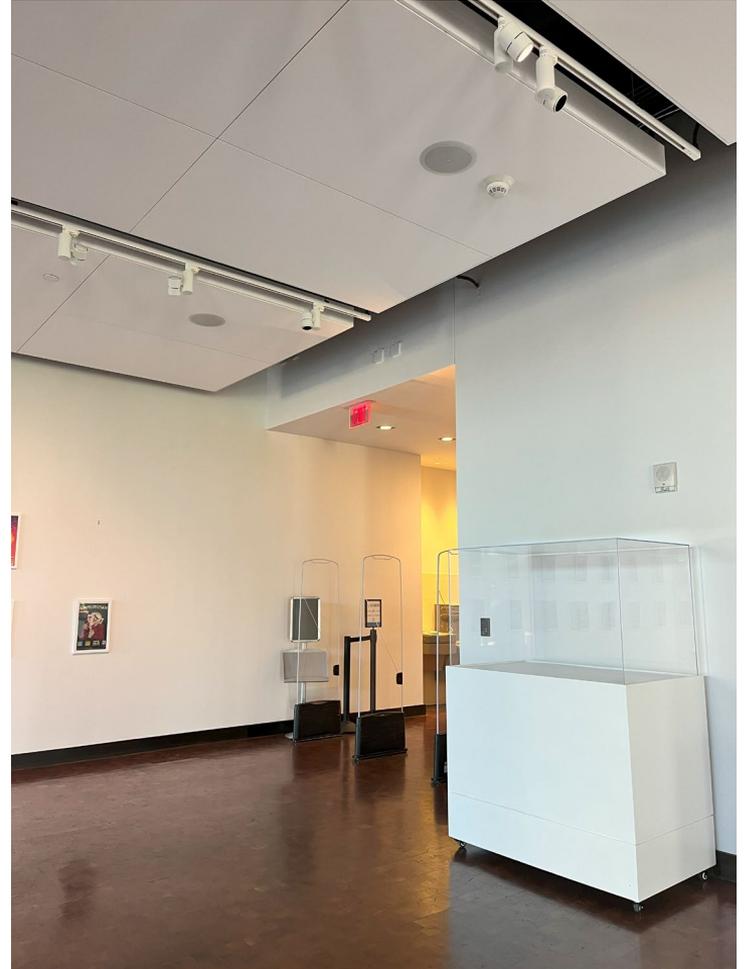
exhibit space with cameras and controlled entry with monitoring capabilities



# Research at the Library

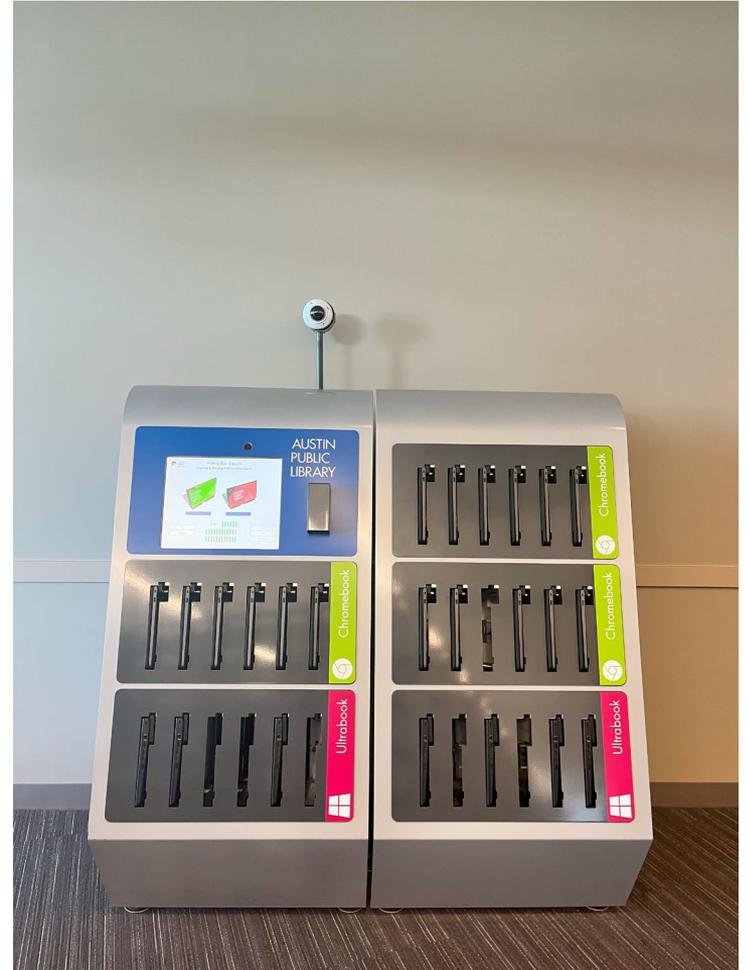
*"[Removing the gates] goes along the direction of where libraries are more **open, trusting**. Let's just trust everyone's going to do the right thing vs. everyone's evil trying to do bad things."*

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)

# Conclusions & next steps

- ❑ Literacy about surveillance technologies – how important is this to people using the library and people running the library?
- ❑ Deliberate on a more *public* policy
- ❑ Transparency in city policies with monitoring technologies – what are peoples' expectations? What are the norms in terms of what patrons believe is going on with monitoring technologies?
- ❑ Training City staff in ethical considerations

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