Municipal Open Data: An Interdisciplinary Analysis

Jan Whittington & Ryan Calo

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The nine data brokers the FTC studied collect information from many sources.*

* The Commission issued identical Orders to File Special Reports (“Orders”) to nine data brokers under Section 6(b) of the Federal Trade Commission Act, 15 U.S.C. § 46(b), to seek information about the data brokers’ practices related to consumer data collection and use.

1 Includes data brokers that sell information from government sources.

2 Includes data brokers that sell information from publicly available sources.
Research Questions

1. Does open data increase public trust in the effective and efficient delivery of public services?
2. How might the release of open data be governed to meet the public need for privacy?
3. What harms could municipal open data lead to, including disparate racial or social impact?
Four Approaches

1. Eight focus groups
2. Interviews with nine departments
3. Technical analysis of data
4. Legal analysis of data
How Data Opens

Cities **PUSH** data to an open data portal

People **PULL** data out (e.g., public disclosure requests)

Cities **SPILL** data (e.g., external or internal breaches)
Hopes

“Having the data be open is an incredible source of accountability. It is a key to democracy.”

“It could be useful for commercial benefit.”

“If a public agency has, as you said, lots and lots of data ... entrepreneurs can use it to make money. One purpose of most governments is to help the citizens thrive, which means to put money in your pocket.”
Fears: Push

“I fear that it would be used to lower public property values, redline insurance, et cetera, in neighborhoods with high crime.”

“I'm worried that data about precincts where people don’t vote much could lead politicians to write them off.”

“If the city ... maintains the ability to selectively refrain from publishing portions of that data, then we’re not a whole lot better off than if they just weren’t publishing in the first place.”
Fears: Pull

“Data is power now.”

“How do you find out which customers are heavy commuters? You just ask the city for all the tapes about license plates...”

“It doesn’t feel safe to me at all. There is a Seattle Public Utility LBGT group... there was a guy requesting all the members’ name and information. He was just anti-gay.”
Fears: Spill

“Can’t keep nothing safe. What’s your definition of open anyway? Everything is open.”

“... cops taking a look because it happens to be on a computer somewhere.”

“If for-profit companies in the health care sector, for example, have under-invested in data security, then it’s fair to say the IT systems of many municipal governments aren’t where they should be either.”
Public Data: Push

Data Sets
- Housing
- Tech Survey
- Business License
- Permitting

Attributes
- persons
- groups
- other

- Name
- Address/Location
- Phone
- Number
- E-mail/URL
- Age
- Gender
- Income
- Home Value
- Zip Code
- Sexual Orientation
- Education Level
- Race
- Language
- Number in Household
- Employment
- Unpermitted Activity
- Internet Use
- Uses of Cable
- Permitted Activity
- Value of Alteration
- Permit Type
Shifts in Data Collection

- real time usage
  - electricity meter mesh network
  - electricity meter via phone line

- real time location
  - transport device location tracking
  - transport parking kiosk data

- video
  - police body worn video
  - police dashboard video

Sensor Subject

- stationary
- mobile

real time usage
real time location
video
Data Requests: Pull

Frequency of Public Disclosure Requests

- paper: $0.15/page
- fax: $0.10/page
- phone: free
- online: free

Anonymous, "frivolous"

Purposeful, identified
Blanket Contract Search

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- Open
- All

Find a Contract by Contract Number

Contract Number:  

Find Contracts

Or Find a Contract by Vendor Name

Vendor Name:  

Starts with
Contains

Find Contracts

Or Find a Contract by Commodity Keyword

Commodity Keyword:  

Starts with
Contains

Find Contracts

Or Find all Approved Blanket Contracts

All Approved Blanket Contracts:  

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City as Customer

“The use or disclosure ... of any City information not necessary for ... performance of Vendor’s responsibility is prohibited."

“It is the understanding of the city that data gathered are encrypted to fully eliminate the possibility of identifying individuals or vehicles."

“[Vendor] personnel will not use, process, or disclose customer data without authorization. [Vendor] personnel are obligated to maintain the confidentiality of any customer data and this obligation continues even after their engagement ends.”
“IN NO EVENT WILL [VENDOR] ... BE LIABLE FOR ... ANY DAMAGES OF ANY KIND ... THAT RESULTS FROM MISTAKES, OMISSIONS, INTERRUPTIONS, DELETION OF FILES OR EMAILS, DEFECTS, VIRUSES, DELAYS IN OPERATION OR TRANSMISSION OR ANY FAILURE OF PERFORMANCE, WHETHER OR NOT RESULTING FROM ACTS OF GOD, COMMUNICATIONS FAILURE, THEFT, DESTRUCTION OR UNAUTHORIZED ACCESS TO [VENDOR] RECORDS PROGRAMS OR SERVICES...”
Our Team

Jan Whittington, *Urban Design & Planning*
Ryan Calo, *School of Law*
Mike Simon, *Center for Information Assurance & Cybersecurity*
Meg Young, *Information School (PhD candidate)*
Peter Schmeideskamp, *Urban Design & Planning (PhD candidate)*
Jesse Woo, *School of Law (alumnus)*