Data sovereignty

How can cities ensure their own and their citizens' sustainable data sovereignty?



Data Sovereignty

- The control and governance of data that is collected or held by a person, entity, nation.
- Informational self-determination: Right to data self-determination of the individual and of the community of the individuals (the city) through information known about that person or entity.
- The sovereignty of persons and municipalities, as regards the creation, access and use of data, both for individual purposes but also, more interestingly, for common purposes (the "common good").

→ Cities' own Data Sovereignty and guarantor / custodian of citizens' Data Sovereignty .

Implications of data as a city public good

- City "identity" is made up of the data it has (that defines it), and the rights granted by its residents to use that data.
 - Scope of rights of the City to access and use that data (vis-à-vis its residents/visitors).
 - Is there an overriding legitimate interest?
- Public value or good for society: data is managed not just for citizen self-determination and freedom, but also used for city data-driven policies for the good of residents and visitors.
- City Rules for managing data in this manner (BCN Decree on ethical data management) sets up
 - Governance Structures (CDO, Privacy Office)
 - Management Processes (transversal consultation, procurement processes, Opendata)
 - Technology Architectures (Data Lake, OpenData portals)
- Treatment of privately held data about the City and citizens/residents
 - Access and sharing obligations public contracts? Other places?
 - Balance of power between Administration and private sector (large companies)

A multifaceted issue with several challenges



Legally speaking:

- Data "ownership" v. the city as a data steward or guardian (trustee) rather than an "owner"
- rights to control the use of data and datasets
- individual's privacy rights in pergonal data;



Technological impacts, digital services

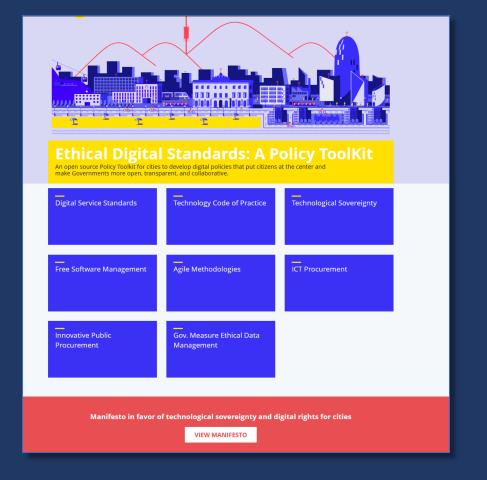
- data architectures and storage
- access rights and "rules" attached to data
- data security,
- data transfers



In organizational terms,

- impacts but also supports the city's need to access and use data for citizens' benefits,
- and legitimates certain uses for the common good that may prevail over individual rights

Examples of Data Sovereignty oriented projects



The Barcelona City Council Open Digitization Plan defines a process of profound, progressive change in the way the city will develop and offer its services to its citizens.

It aims for radical improvement in digital public services, based on our **Ethical Digital Standards**, including in particular the use of free software, open standards, data sovereignty, developing digital services in an agile manner, and ensuring **privacy**, **ethics and security by design**.

Through the open data and data commons strategies, and the use of free software tools, Barcelona aims to guarantee improvements in transparency and interoperability based on open data formats and a set of interoperable and reusable applications and services, while adopting privacy-enhancing and rights-preserving technologies that protects' citizens information self-determination.

The Cities Coalition for Digital Rights, aims to promote, protect and uphold human rights on the internet at the local and global level.

With the support of the UN Human Settlements Program (UN-Habitat), UCLG and Eurocities, we share best practices, learn from each other's challenges and successes, and coordinate common initiatives and actions. Inspired by the Internet Rights and Principles Coalition (IRPC) the work of 300 international stakeholders over the past ten years.

CITIES COALITION FOR DIGITAL RIGHTS



Barcelona Data Management Regulation, 2018

- Part of Barcelona's Ethical Digital toolkit
- A global vision of and strategy for the City Council's data-management plan and the proposed changes towards the responsible and ethical use of data- for data driven policy making and decisions
 - Governance Structures (CDO, Privacy Office)
 - Management Processes (transversal service management boards, procurement processes, Opendata protocols, PIA and privacy compliance)
 - Technology Architectures (Data Lake, Data Commons linked to OpenData portals)
- Obligatory nature of provisions: "baking" data management for sovereignty into administrative processes and ... traditions.

Procurement and contract terms - 2020

A lot of city
data is
created
outside the
city
structures
and entities,
by service
providers





Awareness and skills of public administrato rs and project managers



Negotiation with private operators (licensing for use of public spaces, etc.)

Procurement Data Management Guidelines

- Key data considerations
- Rules of procedure and workflow
- Consultation with Pivacy Officer, Data Office, Other departments

Standard Contractual Clauses

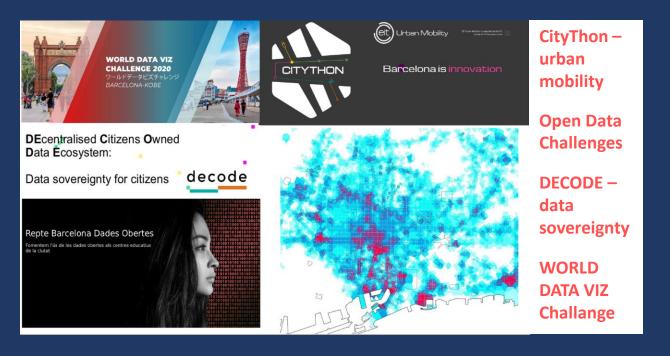
- Template contracts
- Library of clauses
- Explanations and support

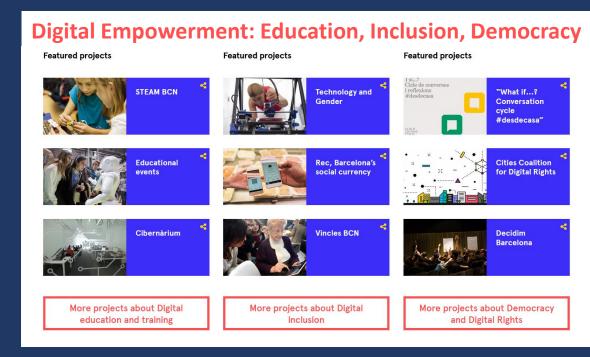
Shock Plan for Digital Inclusion in Barcelona

- Improve access to digital tools
- Citizen training









DECODE: Citizens control of their data

- Blockchain based platform for giving granular control to citizens over the sharing and use of the data
- Use cases... e.g. anonymous or shared citizen participation
 - For more see this afternoon!



DECIDIM: citizen participation in service design

- Open source platform for citizen participation
- Engaging citizens in definition, prioritisation and design of digital services, including data management
- Understanding residents' approach and feeling about data use:
 - Data monitoring for public good (health, environment, security, etc.)
 - Data sharing for optimising services across departments
 - Profiling for targeting public services and programmes, antidiscrimination
 - Identifying need for digital inclusion actions





Data Sharing Work Group: not all about Data Sharing, but about Data Management and Use for understanding the City and its residents and visitors. Sharing is just one aspect of this

HIGHLIGHTED ISSUES

- Privacy: citizen control purpose limitations, conservation, dissemination
- Inclusiveness and bias
- Transparency, accountability- citizen participation in project design
- Fiduciary role of the city data manager, guardian, laboratory, balance
- Free riding and dealing with the private sector
- Non-discrimination of data and algorithms

@innovateSA @emily_royall



CIVTECHSA PROGRAMS ABOUT COMMUNITY NEWS CONTACT Q

Community Conversations: Bias in Public Health Data

Bringing together technologists, community members & public health professionals to discuss bias in public health data.





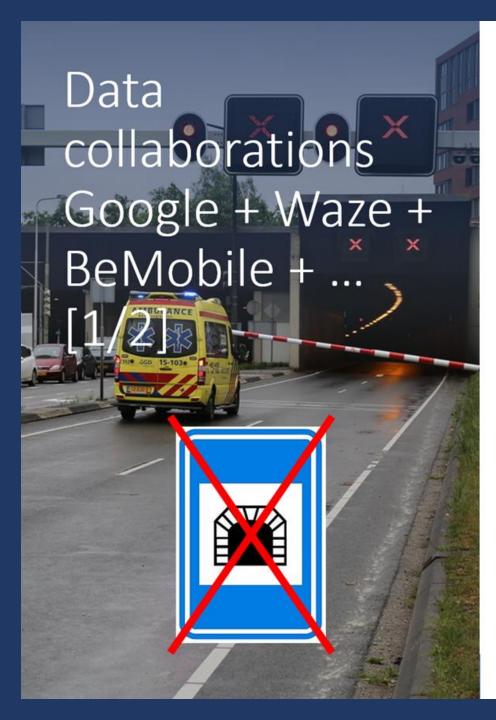
COMMUNITY CONVERSATIONS VIRTUAL EVENTS

Hosted by CivTechSA in partnership with the City of San Antonio's Office of Innovation, this Community Conversations event series tackles three areas where bias impacts data-driven policymaking: Identity, Reach, and Trust.

Each event will consists of a 40-minute panel of local leaders providing experience and educational.

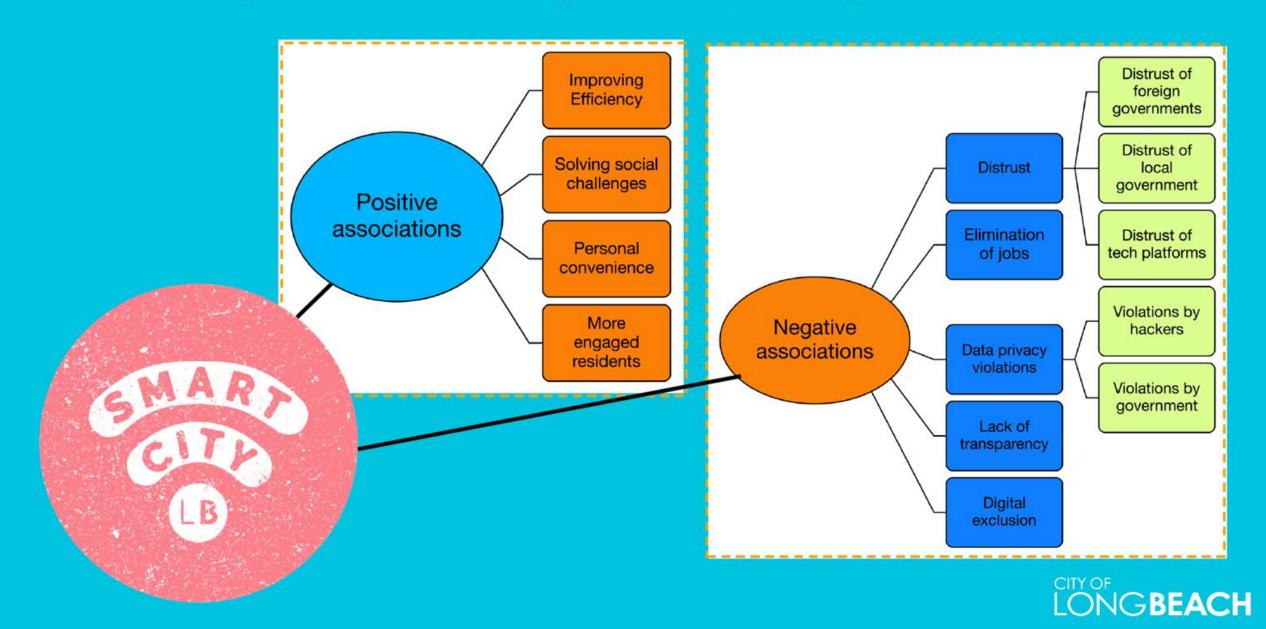
Systemic Change Starts with Data

- Bias data input > Bias policy, program allocation, services
- Addressing Bias in policy means targeting bias in data
- Start with the simplest example: city surveys
- Listen to the community: Community Conversation
 Series
- Identity How data is collected about you
- Reach How surveys are administered & barriers to participation
- Trust How institutions & non-human actors use data for decision making
- Findings reviewed by our office & drive internal policy



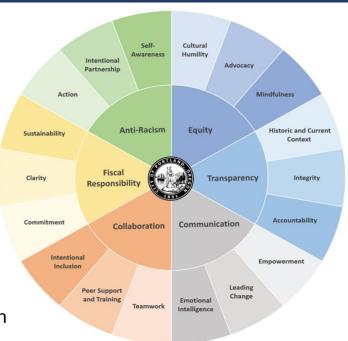
- Amsterdam shares information from (traffic) operating systems in real time with navigation companies
 - Closures of tunnels
 - Road closures due to events
 - Bridge openings (in progress)
 - Road works (in progress)
- Information is shared via the National Road Traffic Data Database
 - Amsterdam is paving the way as a pilot municipality
 - Upscaling through additional pilots Rijkswaterstaat, Noord Holland and The Hague
 - Basis for national roll out
- Companies process data in real time in navigation systems
 - Implemented at Google Maps (pilot), Waze and BeMobile
 - Planned for all other service providers (level playing field)
- Results:
 - Road users: better traffic flow in the city
 - Residents: avoid unnecessary nuisance and air pollution
 - Road regulators: less inconvenience

Smart Long Beach - Participatory by design



Racial Justice as a core value to regulating emergent technology

Hector Dominguez City of Portland, OR htttps://www.smartcitypdx.com



PORTLAND, OREGON











el Periódico

BiZiA, el proyecto elegido para construir un sistema de aparcamiento de bicis junto al tranvía

Aragón

28/10/2016 A- A+ 🖨 🗣 0 La propuesta BiZiA ha sido escogida por unanimidad como ganadora del concurso de ideas BiciSur un proyecto para construir un sistema intermodal de aparcamiento de bicis en el inicio de línea del tranvía ubicado en Valdespa se implicado par el que ma el línea del tranvía ubicado en Valdespa se implicado par el que ma el línea del tranvía ubicado en Valdespa se implicado par el que ma el línea del tranvía ubicado en Valdespa se implicado par el que ma el línea del tranvía ubicado en Valdespa se implicado par el que ma el línea del tranvía ubicado en Valdespa se implicado par el que ma el línea del tranvía ubicado en Valdespa se implicado par el que ma el línea del tranvía ubicado en Valdespa se implicado par el que ma el línea del tranvía ubicado en Valdespa se implicado par el que ma el línea del tranvía ubicado en Valdespa se implicado par el que ma el que ma el línea del tranvía ubicado en Valdespa se implicado par el que ma el que el que ma el que el qu



Towards a coherent framework and actions for technology and data sovereignty at (at least) 5 + 1 levels?

Inter-city cooperation and sharing

Citizen-centred digital service policy making

Ethical Digital Service design

Open Infrastructure Deployment

Responsible and Ethical Data Management

Citizens, Administrators, Policy makers, Service providers

Wider considerations of information self-determination

How data use and data policy can, like a personality trait, define what type of city a city is – its own "identity

Freedom from false or biased information and information systems based on such distorted data; Where does an individual's data and data rights (to control) "stop" and another's "start" (like freedom)

The rights of a community to data that can may be essential to protect or sustain the community (e.g. information about Covid infection)