SMART CITIES: WHAT'S NEXT

ANTHONY TOWNSEND • DELFT VIA VIDEO LINK • 3 NOV 2016

STEPPING BACK, WE CAN SEE...

- Where smart cities come from
- What they have achieved
- The shift to long-term thinking
- Dilemmas where new technology enters old cities

WHERE SMART CITIES COME FROM

In 2008, for the first time…

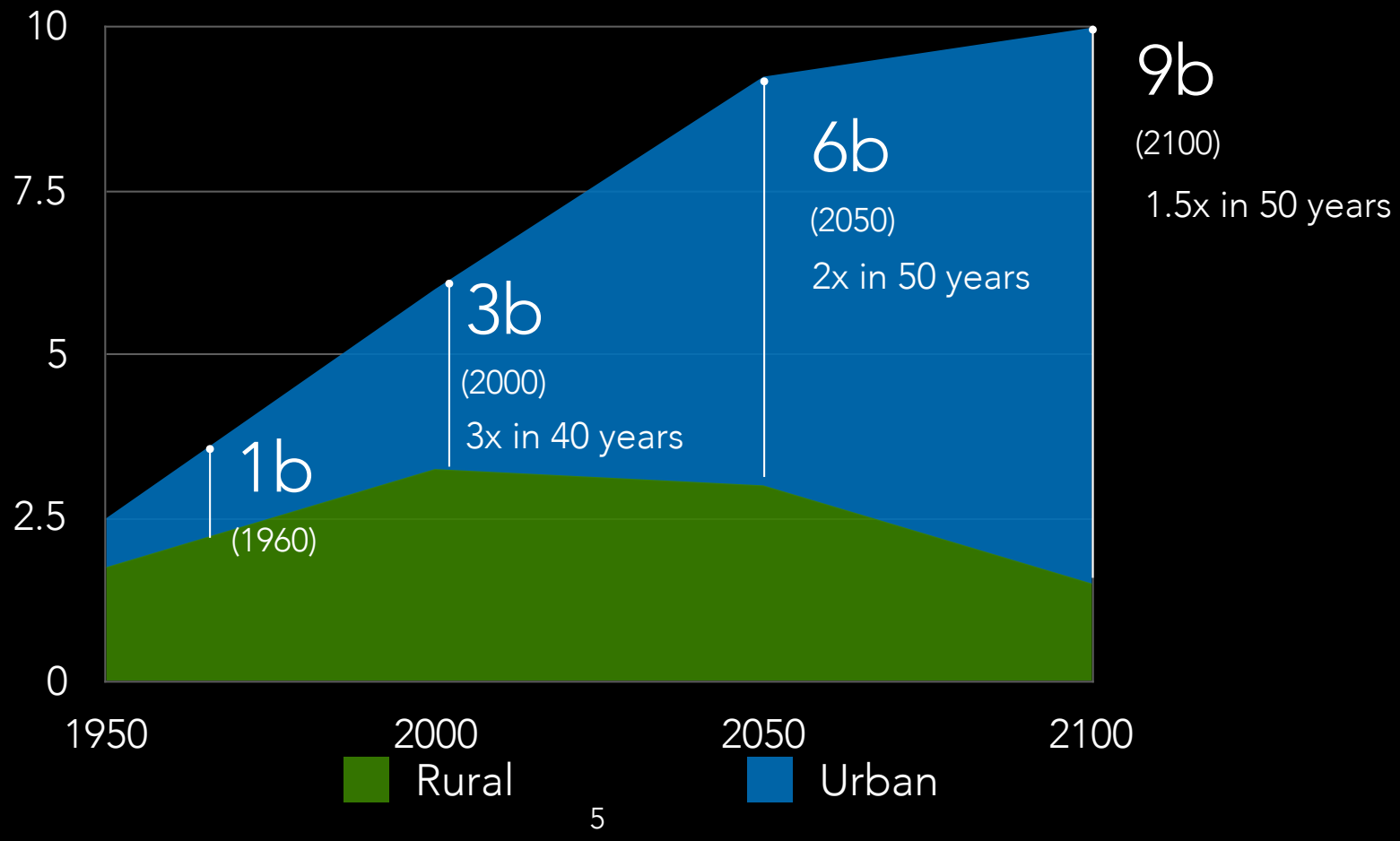
More people lived in cities than the countryside.
We are now an urban species.

More mobile broadband subscribers than fixed.
The Internet has been untethered.

More things are connected than people.
The Internet isn't about virtual spaces,
it's about physical places.

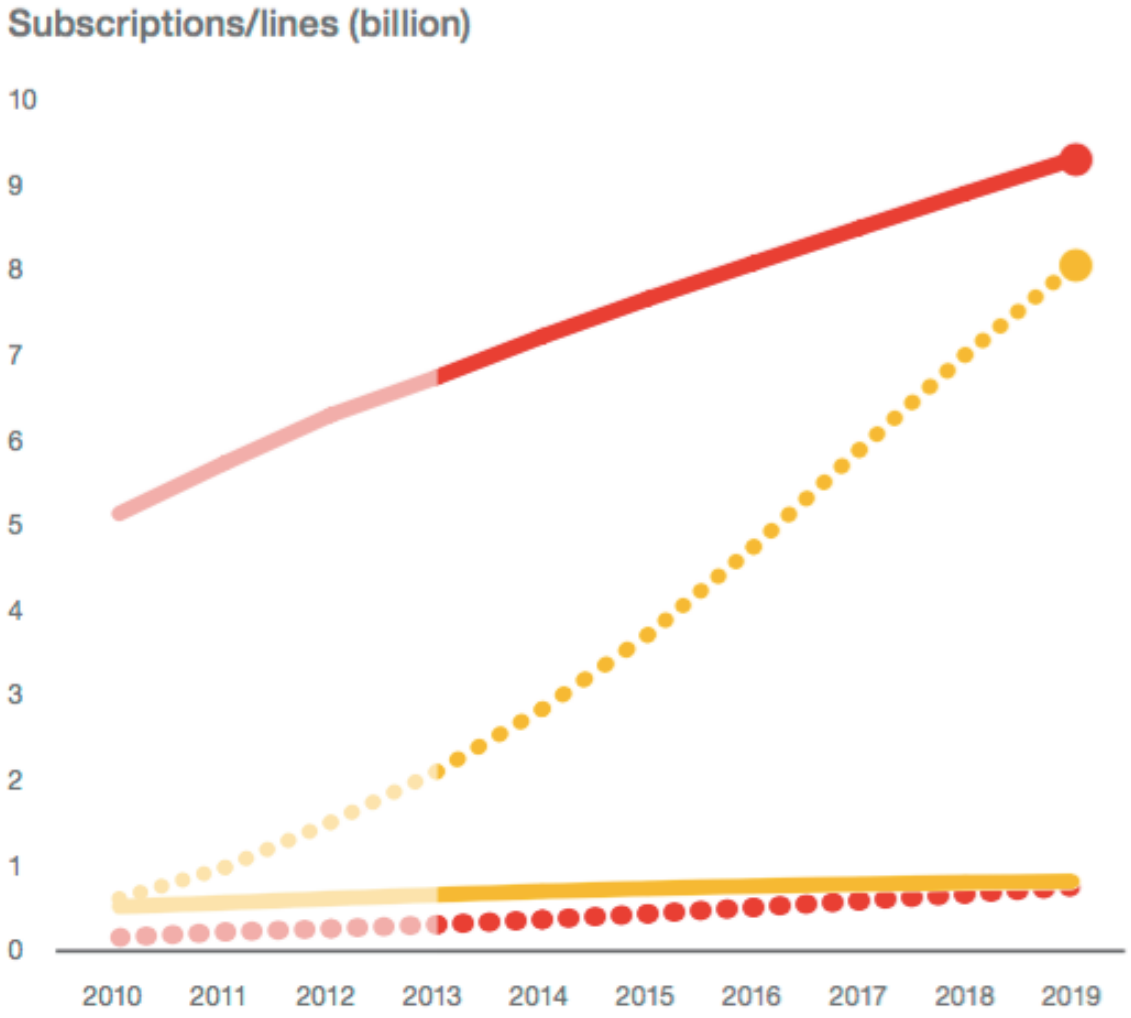
URBANIZATION

GLOBAL URBAN POPULATION



SOURCE: UNITED NATIONS POPULATION DIVISION

UBIQUITY, PART 1
MOBILE BROADBAND



9.3 BILLION

mobile subscriptions by the end of 2019

4X

growth in mobile broadband subscriptions between 2013 and 2019

Mobile subscriptions

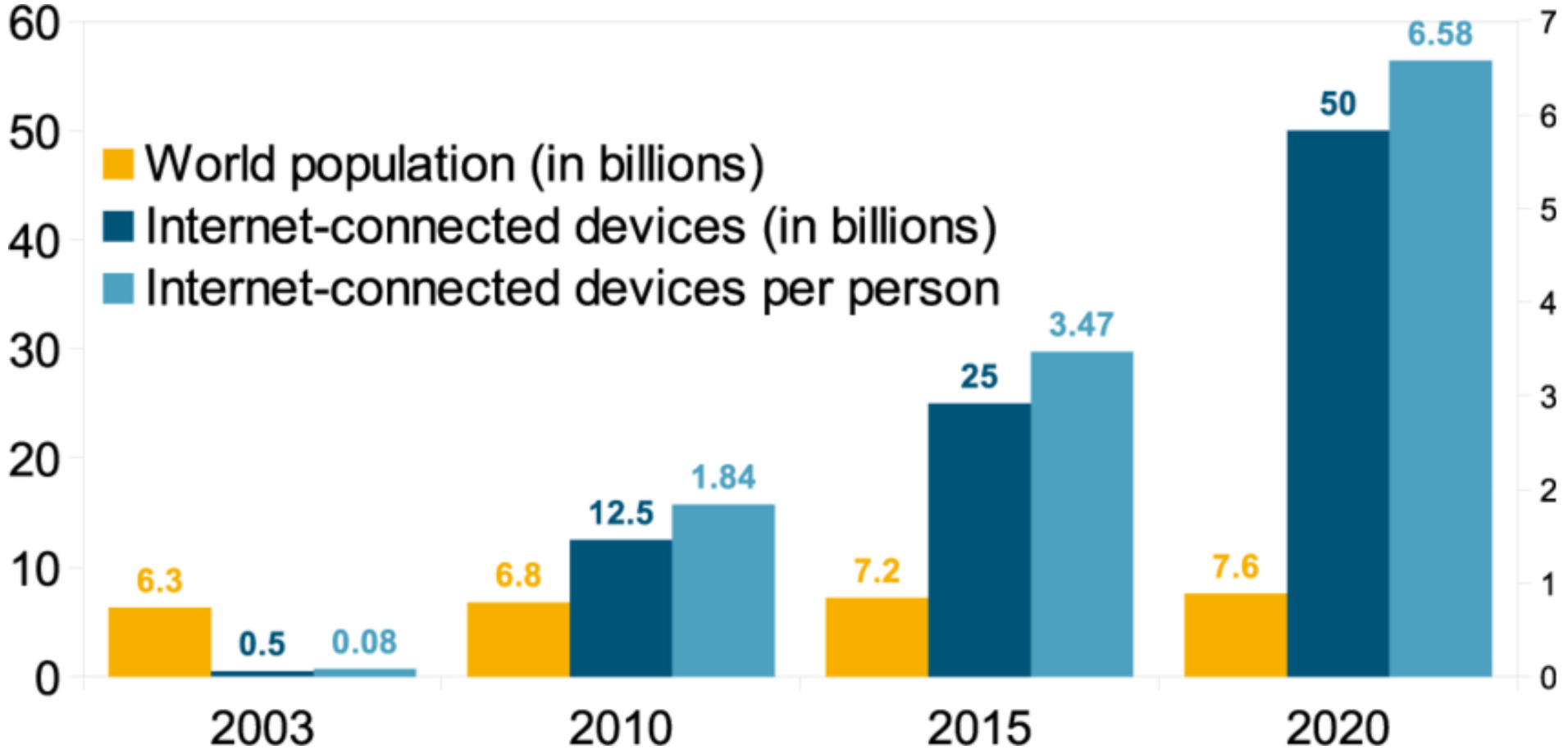
Fixed broadband subscriptions

Mobile broadband subscriptions

Mobile PCs, tablets and mobile router subscriptions

SOURCE: ERICCSON, 2013

UBIQUITY, PART 2
THE INTERNET OF MACHINES



SOURCE: CISCO SYSTEMS

A NEW GLOBAL INDUSTRY

2011 $100 billion (Pike Research)

2013 $408 billion (Arup)

2014 $1.56 trillion (Frost & Sullivan)

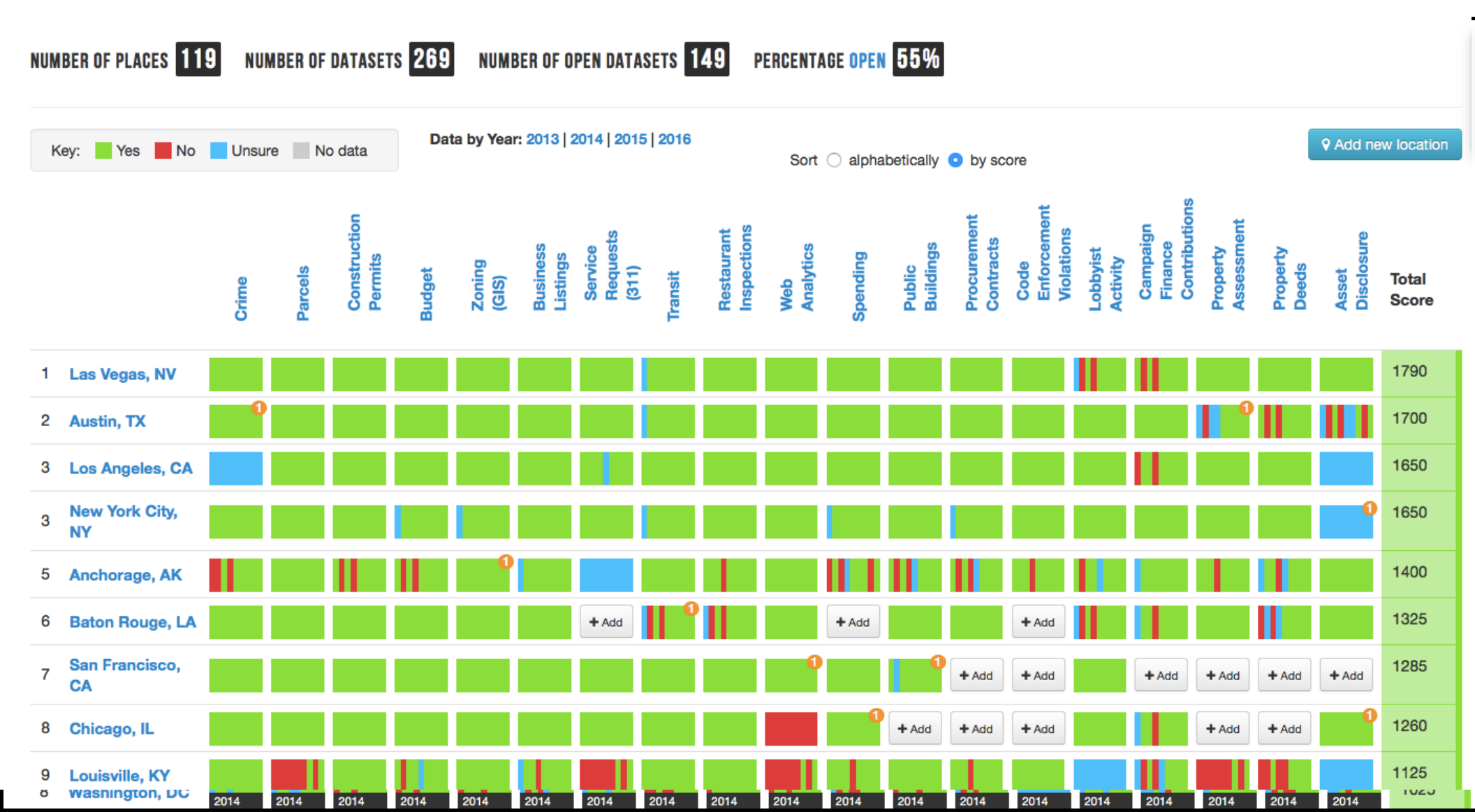
~2-3% of global infrastructure spending

~2-3% of a district infrastructure cost

~2-3% of building construction cost

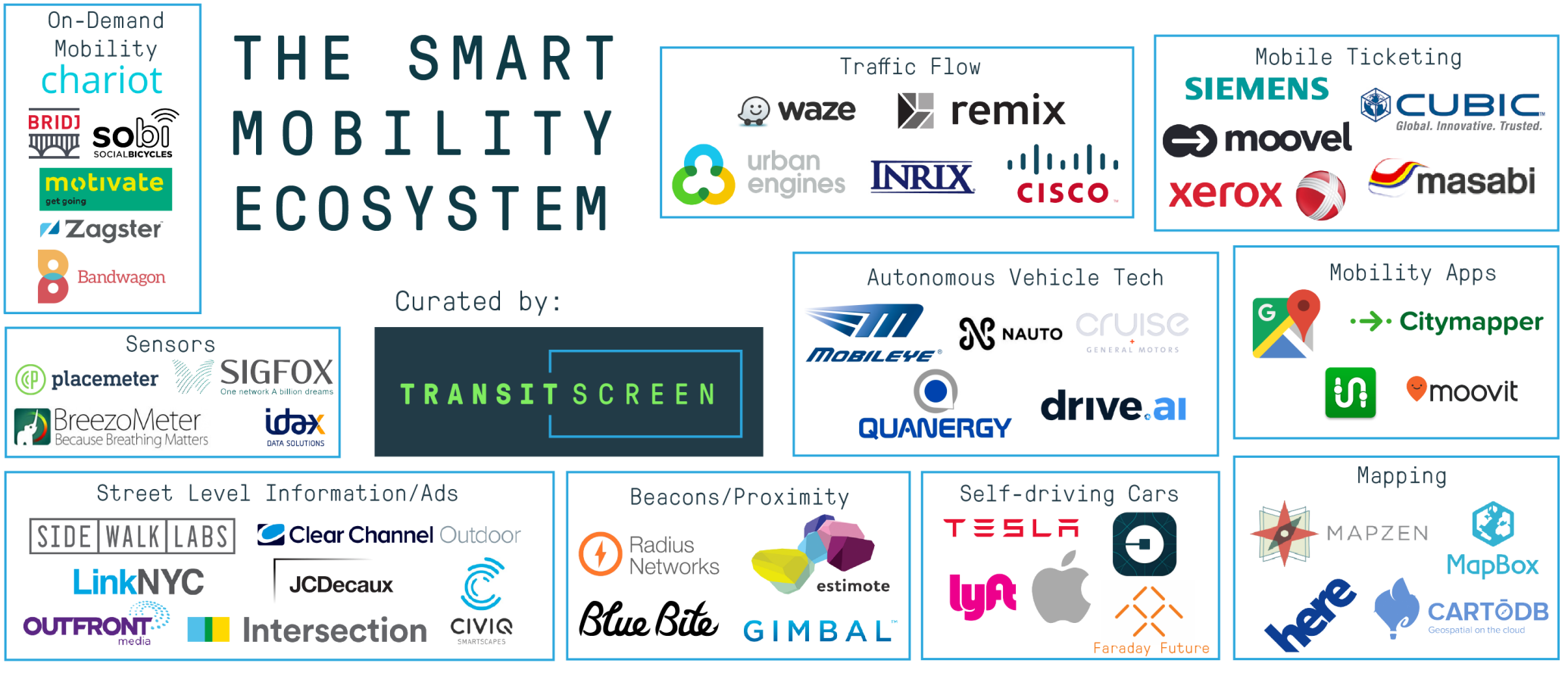
SOURCE: ANTHONY TOWNSEND, BITS + ATOMS

WHAT SMART CITIES HAVE ACHIEVED

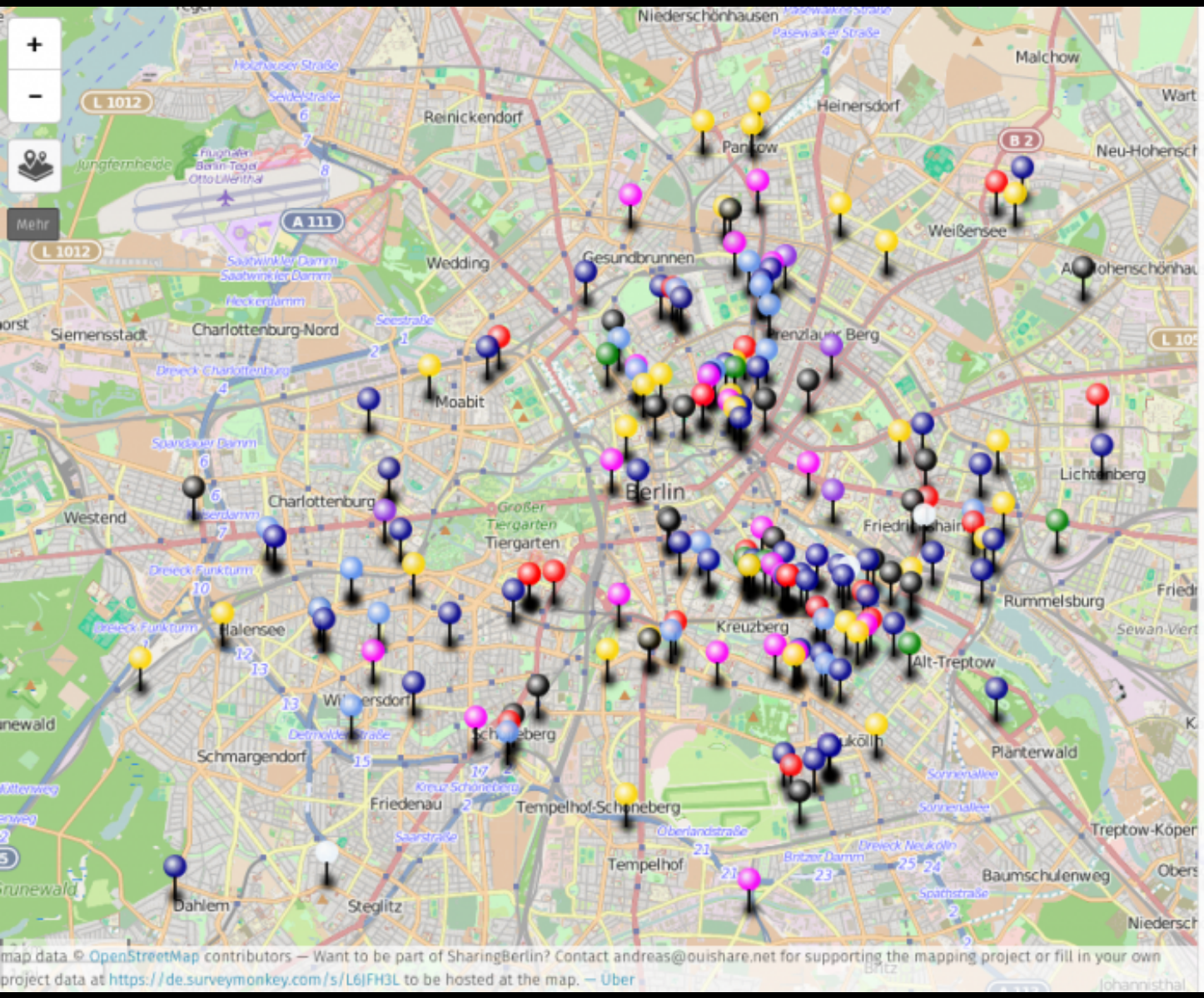


UNLEASHED TRANSPARENCY

THE SMART MOBILITY ECOSYSTEM



RE-PROGRAMMED MOBILITY



Sharing Berlin

von sharingberlin

Mapping the Berlin Sharing Economy Startups and Companies

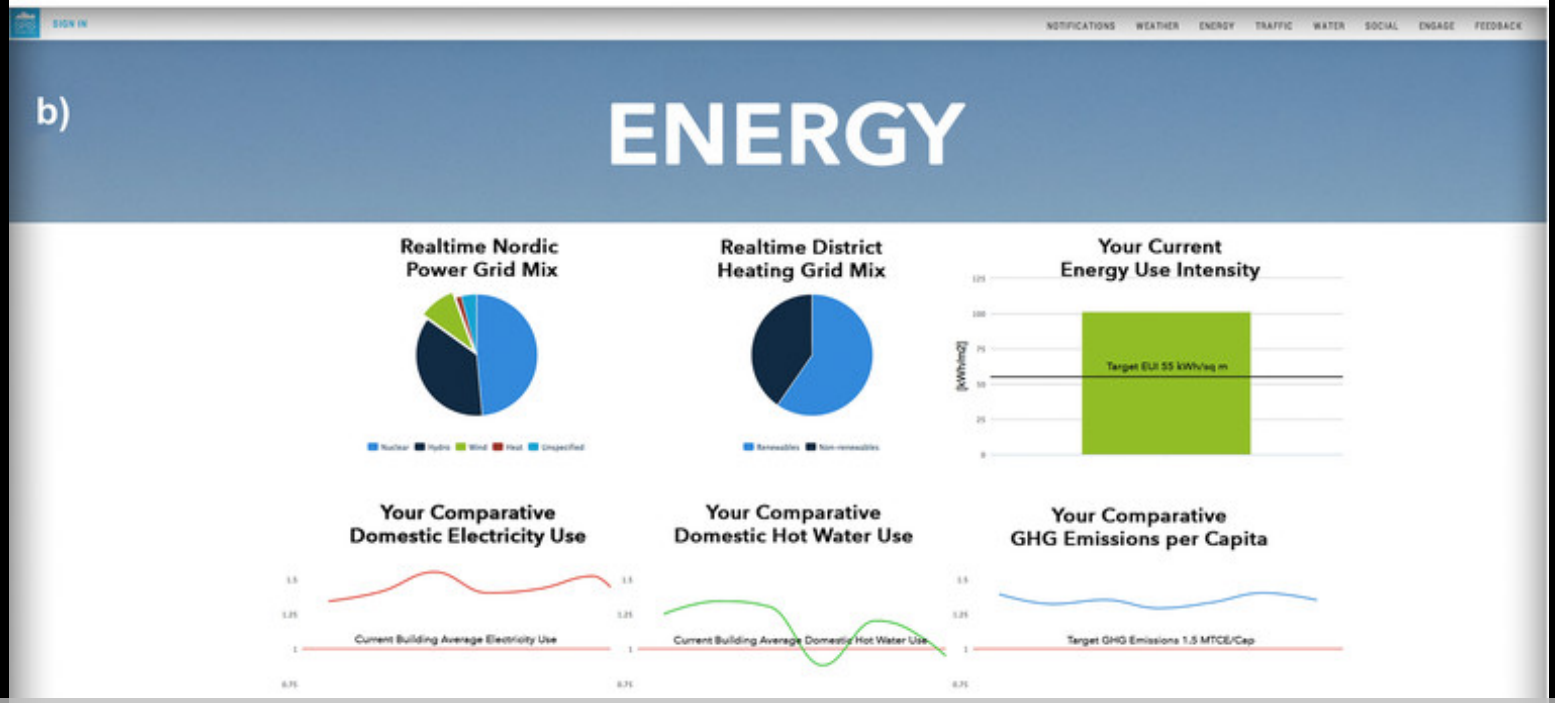
- **Arbeit & Tätigkeiten**
- **Energie**
- **Gegenstände**
- **Geld & andere Transaktionssysteme**
- **Gemeinschaftsbildung & Selbstorg.**
- **Mobilität**
- **Nahrung**
- **Räume**
- **Wissen**

▼ Credits

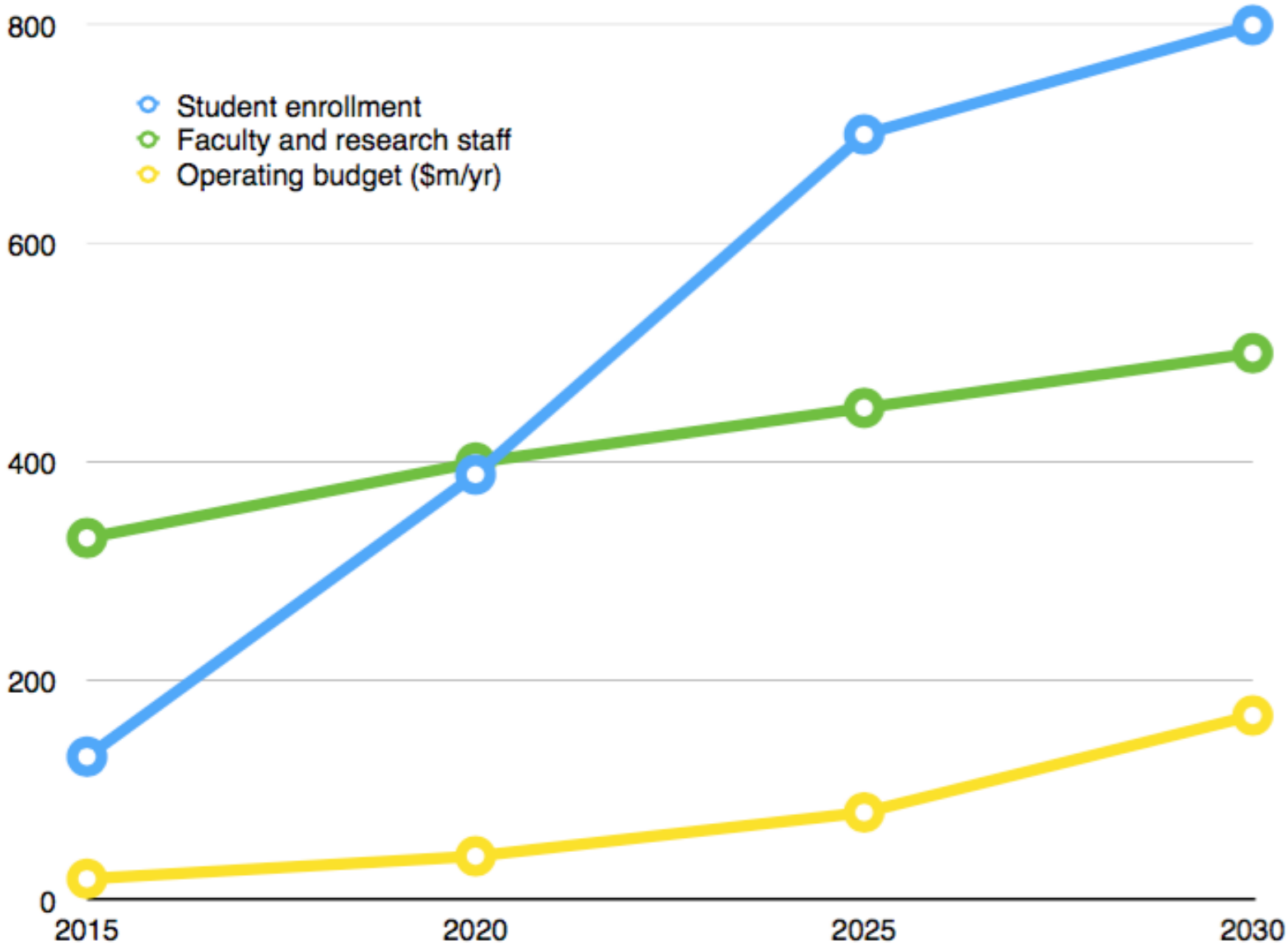
Credits der Benutzerinhalte

Want to be part of SharingBerlin? Contact andreas@ouishare.net for supporting the mapping project or fill in your own project data at https://de.surveymonkey.com/s/L6JFH3L to be hosted at the map.

RE-INVENTED AND REVIVED SHARING

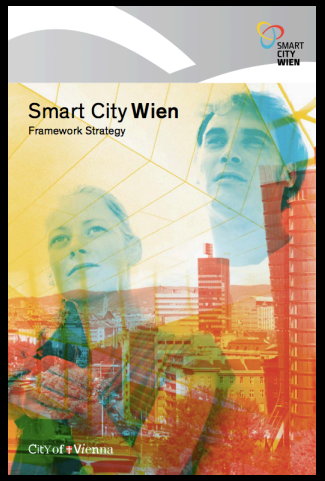


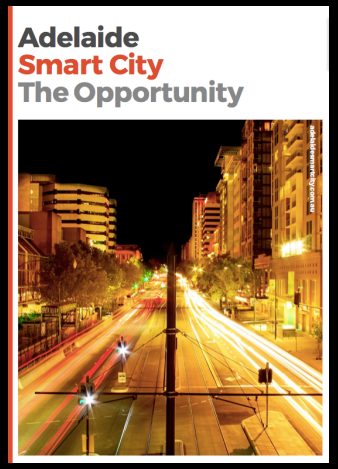
DEVOLVED SUSTAINABILITY



LAUNCHED A NEW URBAN SCIENCE

THE SHIFT TO LONG-TERM THINKING



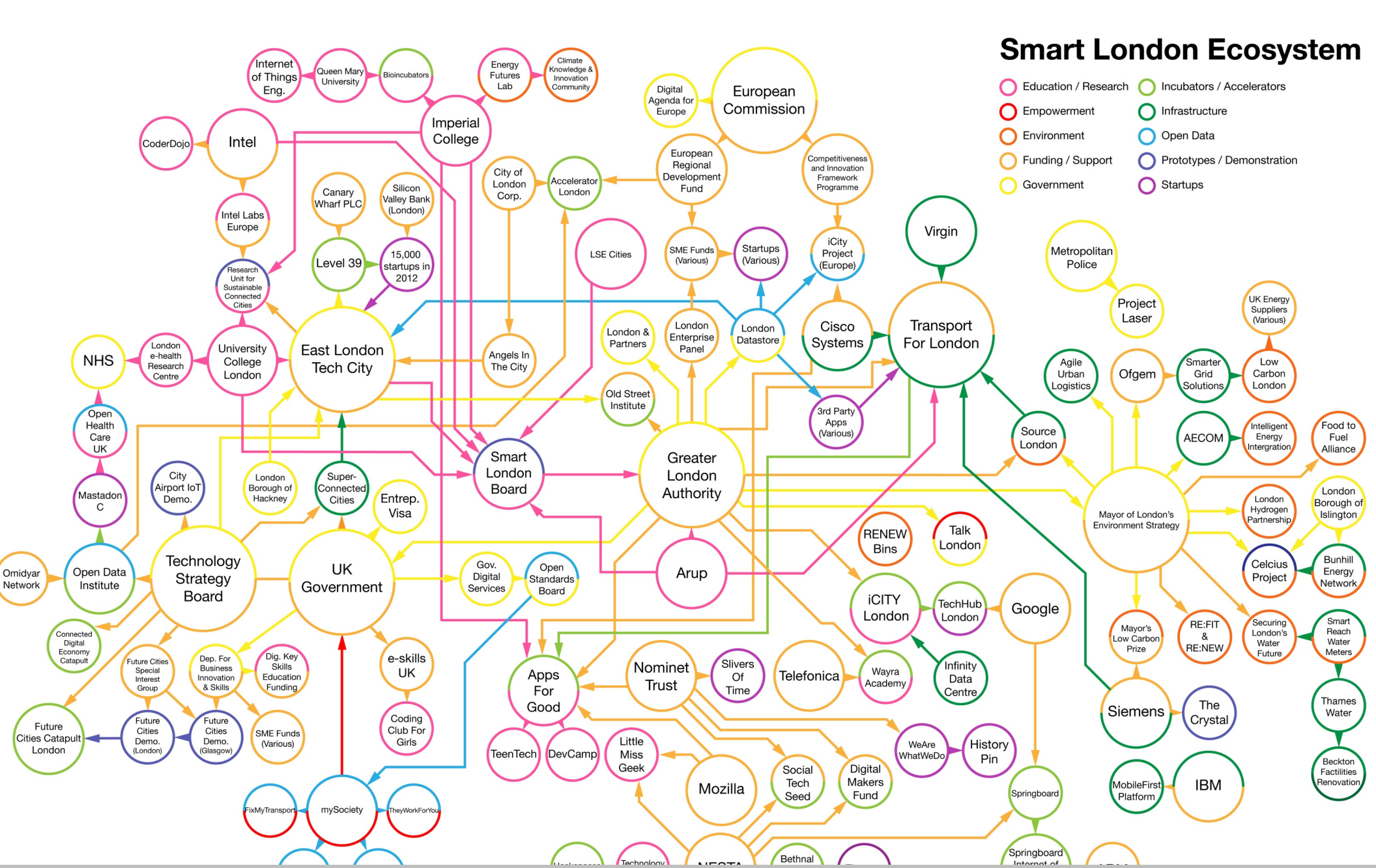


HTTPS://PERMA.CC/HX3F-AVEJ

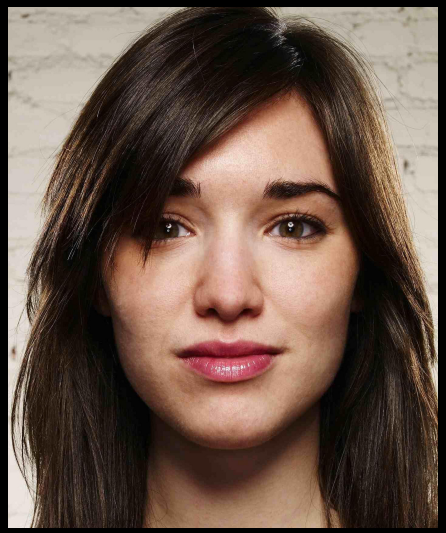
DIGITAL MASTER PLANS

	NYC	Dub.	Chi.	Lon.	S.F.	H.K.	Sing.	Barc.
Internet access	4	0	3	0	4	0	0	0
IT skills	7	6	6	2	9	3	2	0
Open data	6	4	3	4	8	1	0	2
Citizen engagement	7	2	1	4	15	1	1	1
E-government	3	9	4	11	13	4	0	3
IT infrastructure	1	7	1	1	89	4	5	5
IT industry promotion	2	16	8	7	5	0	0	0
Urban infrastructure	0	1	2	0	10	0	2	15

WHAT THE PLANS SAY



HOW THE PLANS WERE MADE



New York
Single agency

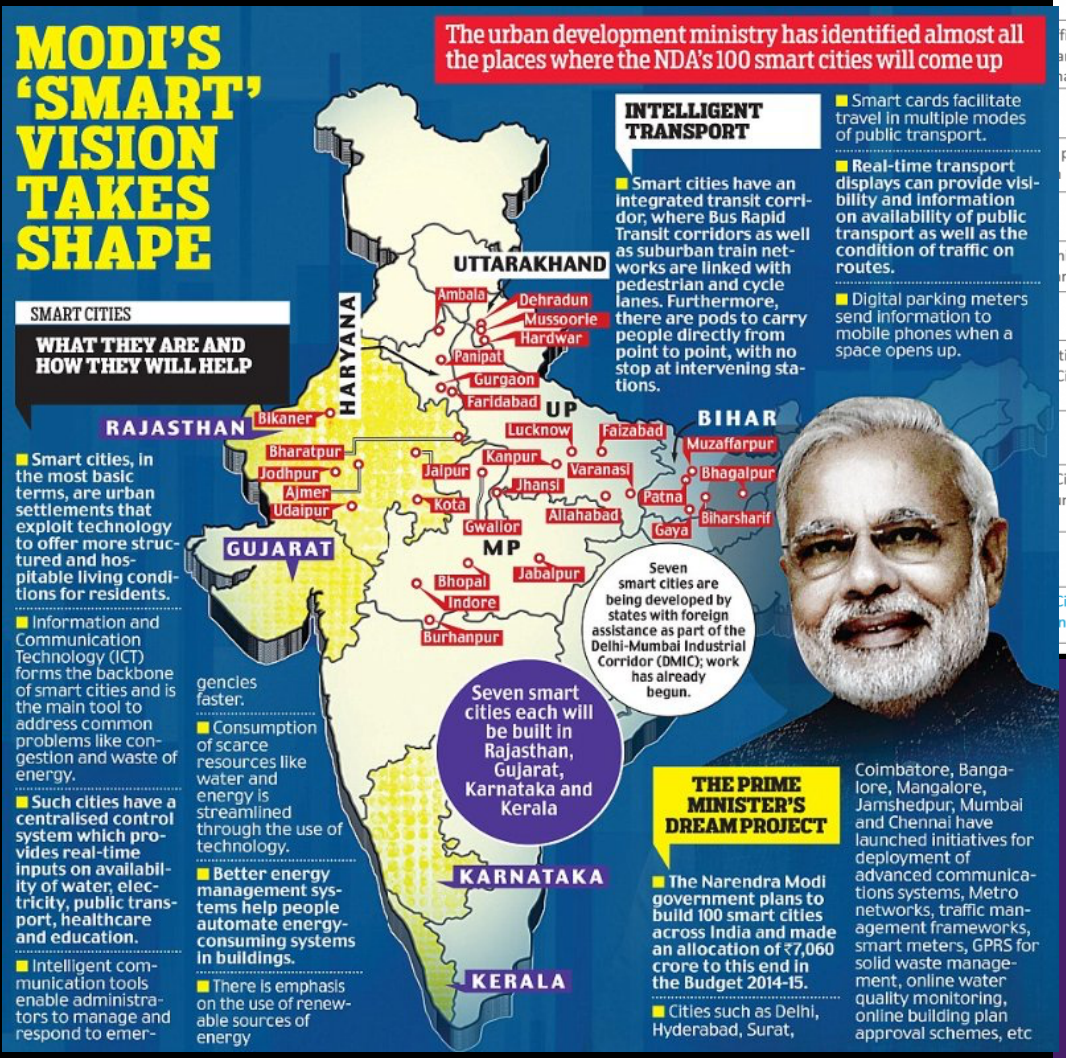
Chicago
Devolved to an NGO

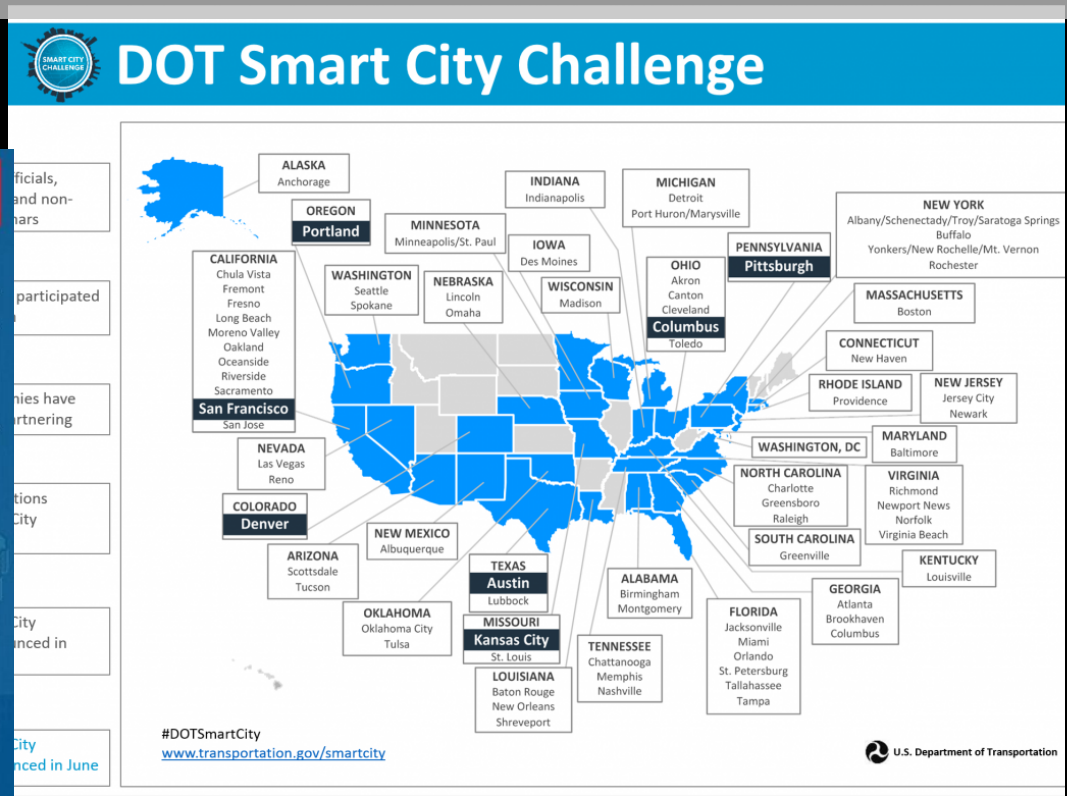
SMART
LONDON
INNOVATION
NETWORKS

London
Delegated to stakeholders

WHO IMPLEMENTS THE PLAN

THE EVOLVING MOVEMENT





THIRD WAVE OF SMART CITIES

Autocratic city-states

Welfare states

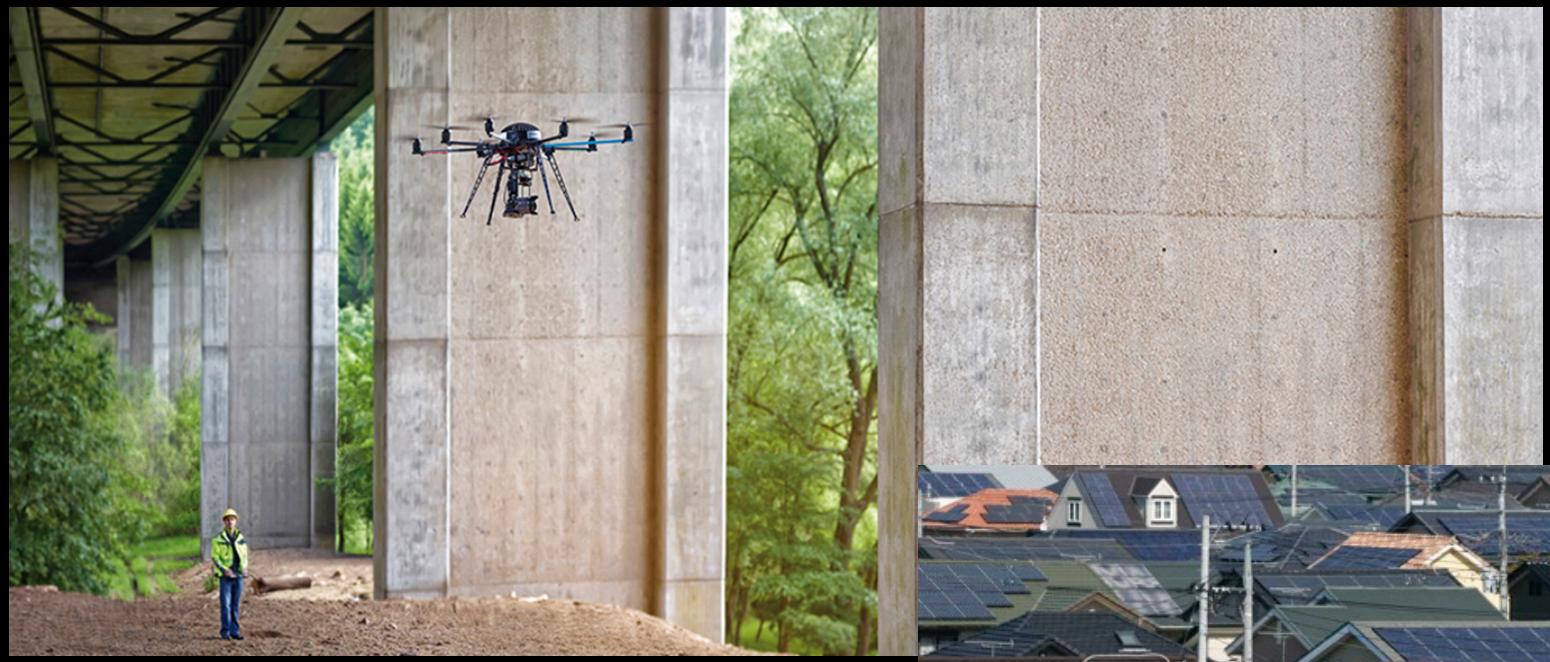
Large, dysfunctional democracies

NEW TECHNOLOGY, OLD PROBLEMS

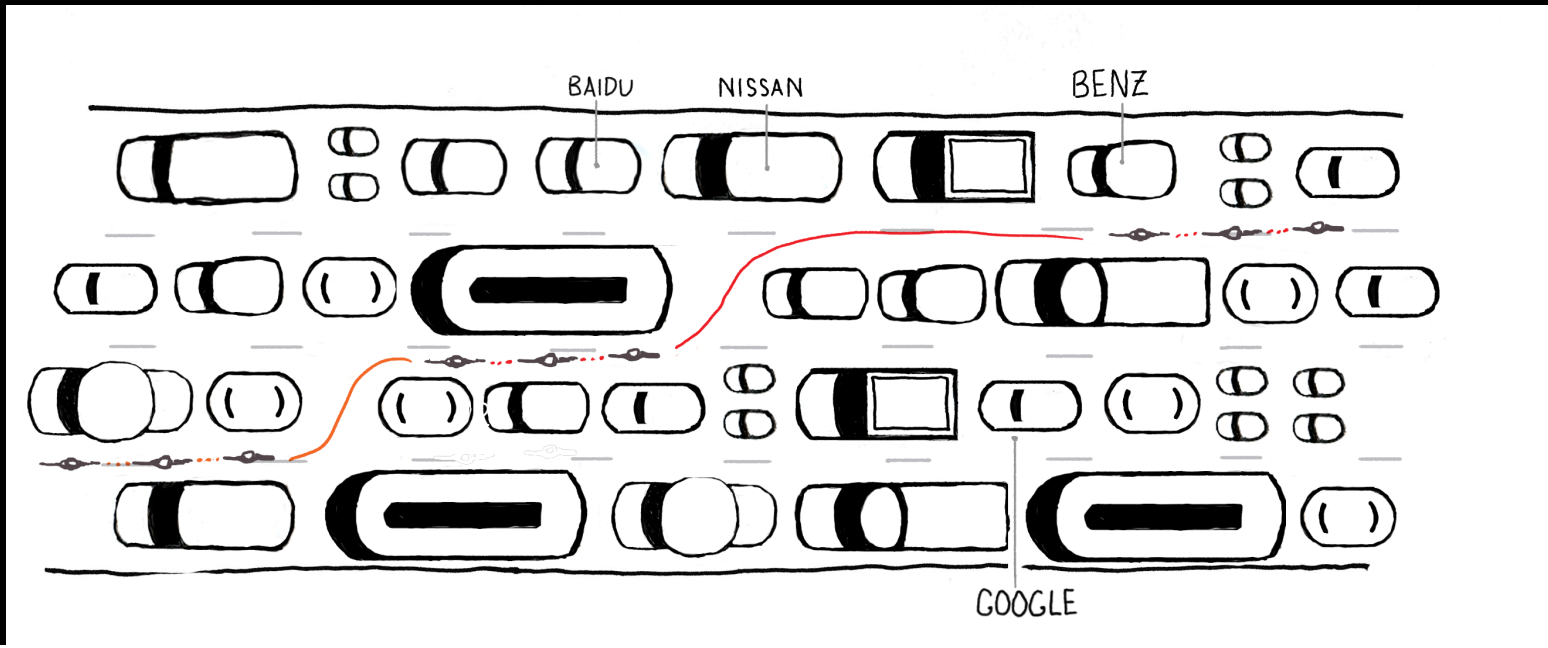
smart cities are...
"communities where government, business, and citizens are using **digital technology** to address **timeless** urban problems."

MORE PASSIVE PARTICIPATION OR UBIQUITOUS SURVEILLANCE?

AUTOMATION FOR EFFICIENCY **AND** EQUITY?



SEAMLESS SERVICES: ENHANCING OR UNDERMINING GOOD URBAN DESIGN?

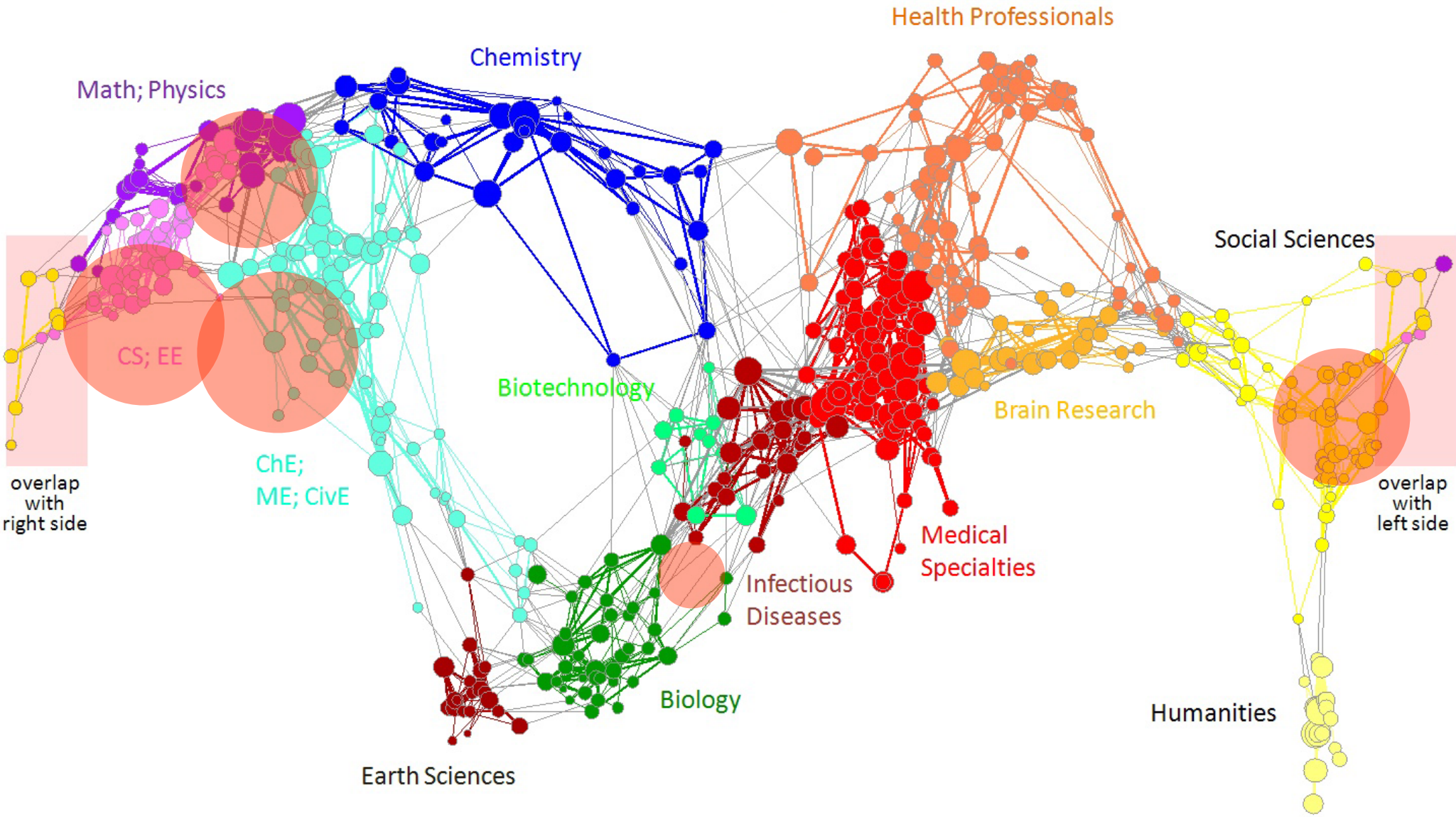


AUTONOMOUS OPERATIONS
DRONES FOR GOOD, NOT EVIL

FRAUNHOFER INSTITUTE FOR NON-DESTRUCTIVE TESTING, SAARBRÜCKEN, GERMANY

EVIDENCE-BASED GOVERNANCE: CATALYST FOR REFORM, OR BAND-AID FOR BUREAUCRACIES?

URBAN SCIENCE: NARROWING OR BROADENING OUR PERSPECTIVE ON URBAN COMPLEXITY?



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