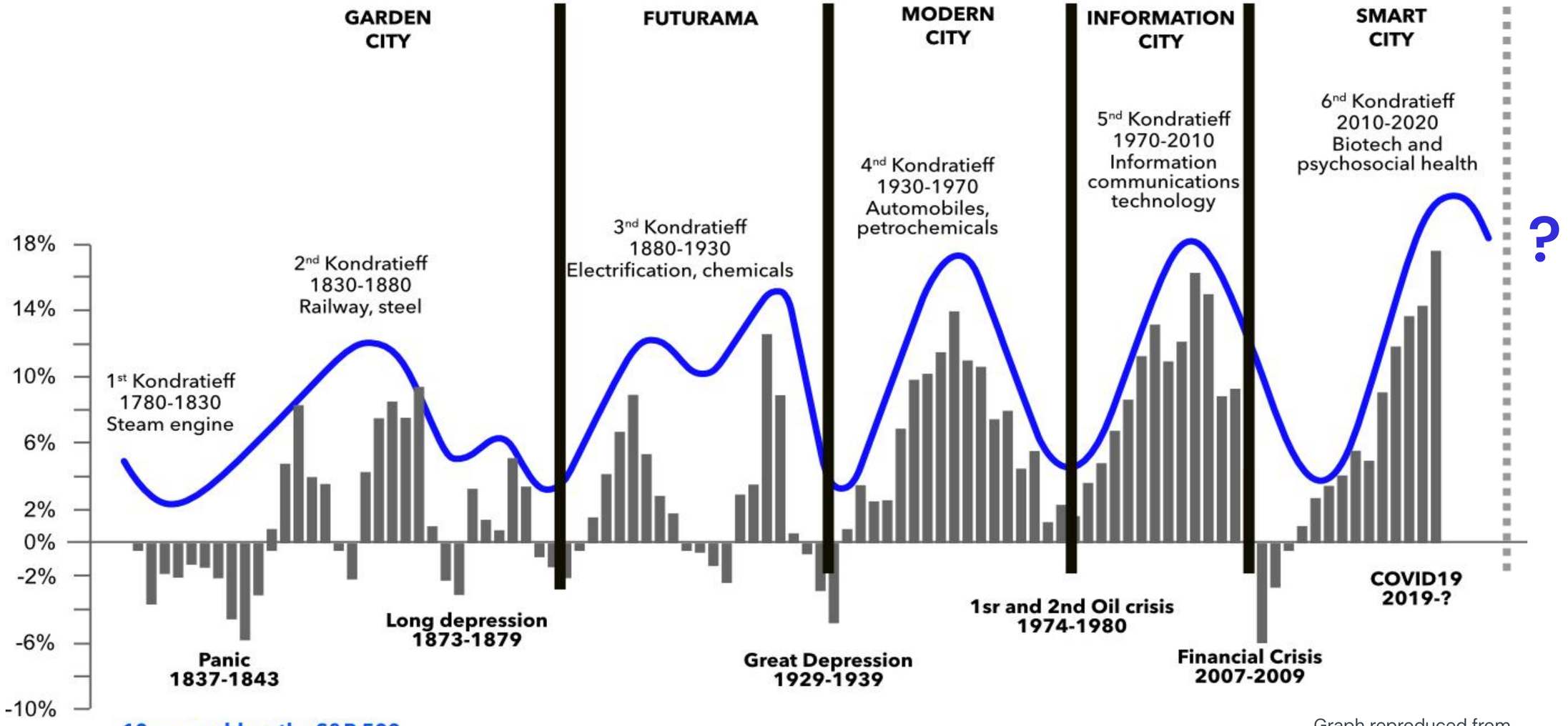
The 7th transformation



Graph reproduced from

"Urbanism at a Turning Point. Modern, Postmodern, Now. Lehtovuori, P. & Varna, G. (2017)

DEMOS HELSINKI

STRATEGIES FOR A JUST AND EQUITABLE TRANSFORMATION

DEMOS HELSINKI

SMART CITIES ARE NOT THE SOLUTION

The annual deployment of smart-city projects is in steep decline. Europe reached its peak already in 2016 while North America in 2018.

The decline started before the pandemic.

Technology companies are pulling out from the big smart city push as well as the poster child of the smart city by Sidewalk Labs in Toronto was abandoned this year.

At the same time, there is clear scepticism from the general population on data collection, data analysis and how this information is utilised in local governance for policymaking.

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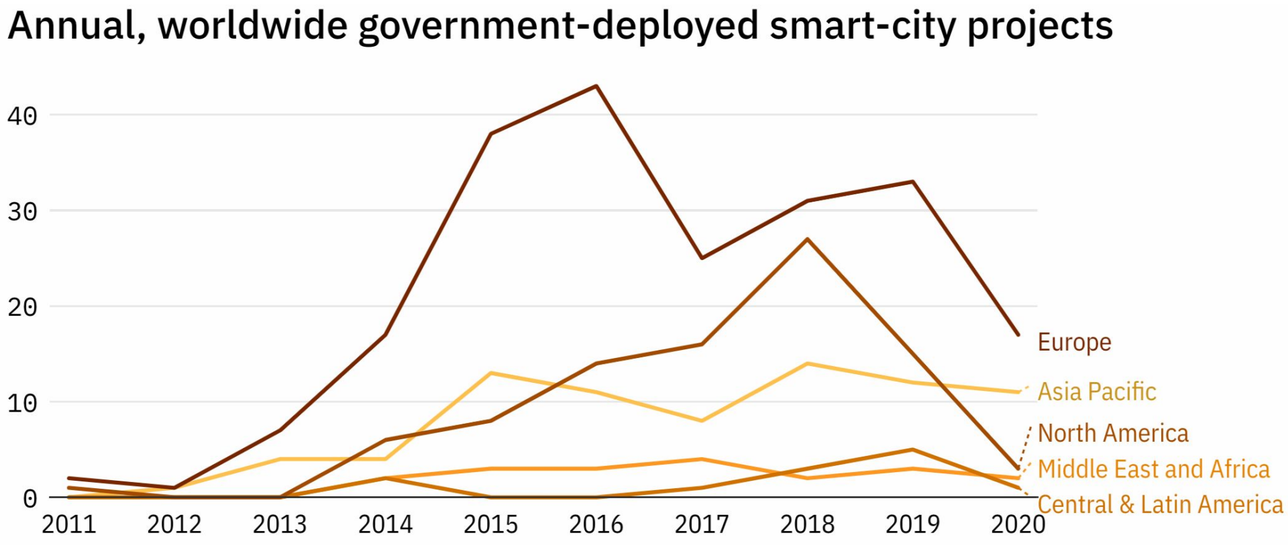

Source: GlobalData

CITY MONITOR


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TECH

Cisco Systems Pulls Back From Smart City Push

The challenge of modernizing the urban landscape has intensified with the pandemic pressuring public

"It's hard to retrofit old cities for the 21st century."

- Sidewalk Labs CEO, Freakonomics radio, 2019

PRODUCT NEWS PMX SERIES FEATURES CITY OF THE FUTURE PODCAST ARCHIVE | S

Why we're no longer pursuing the Quayside project — and what's next for Sidewalk Labs

Daniel L. Doctoroff Follow

May 7, 2020 · 3 min read

SHIFTING KPIs

We developed KPIs based on the sensors we have. We started to build a gap between how urban systems work and how people feel in the city.

Smart-City KPIs: Operational efficiency, Productivity, Transit speed, Information security, Infrastructural connection to services, Road traffic speed

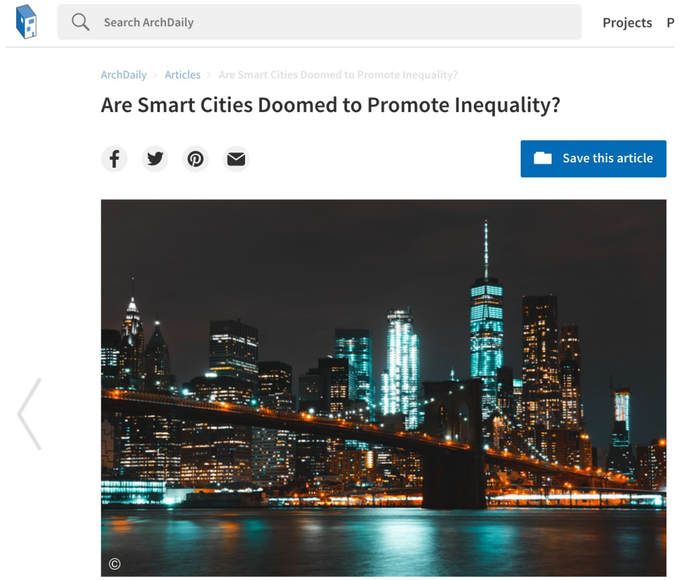
Missing KPIs: Joy, Stress, Equality, Fear Uncertainty, Surprise etc.

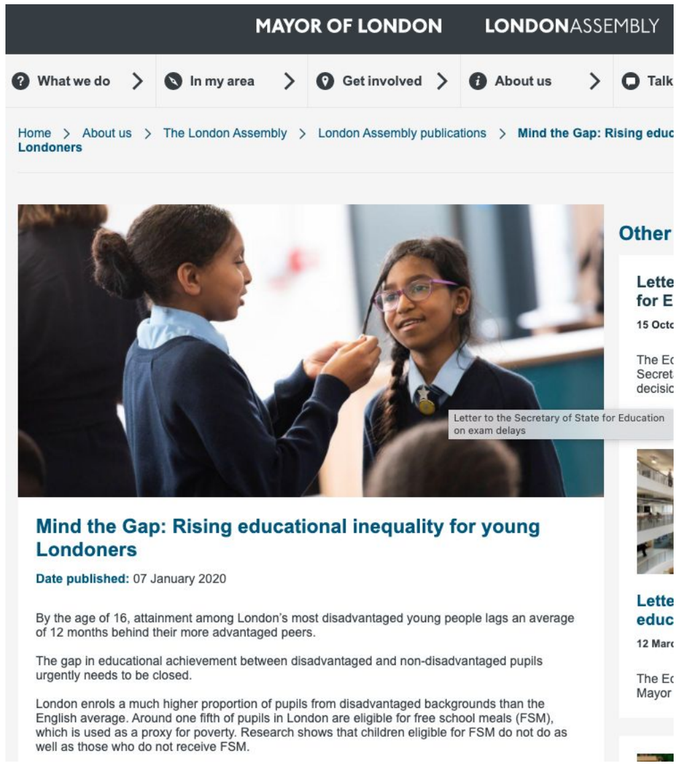
KPIs for who? With the rise of New Localism, cities need to cultivate intangible assets more than before. Smart City KPIs are widely utilised to attract more commuters, visitors and jobs to the cities but less help the local community to grow skills and knowledge.

OPINION

Can the Wired City Also Be the Equitable One?

It's no surprise that trading creates winners and losers. What is surprising is the degree to which those winners and losers are decided by algorithm. As such, I think it gives us a glimmer of a harsher civic future that SMART city advocates would paint.





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OPTIMISATION GENERATING SPATIAL INJUSTICE

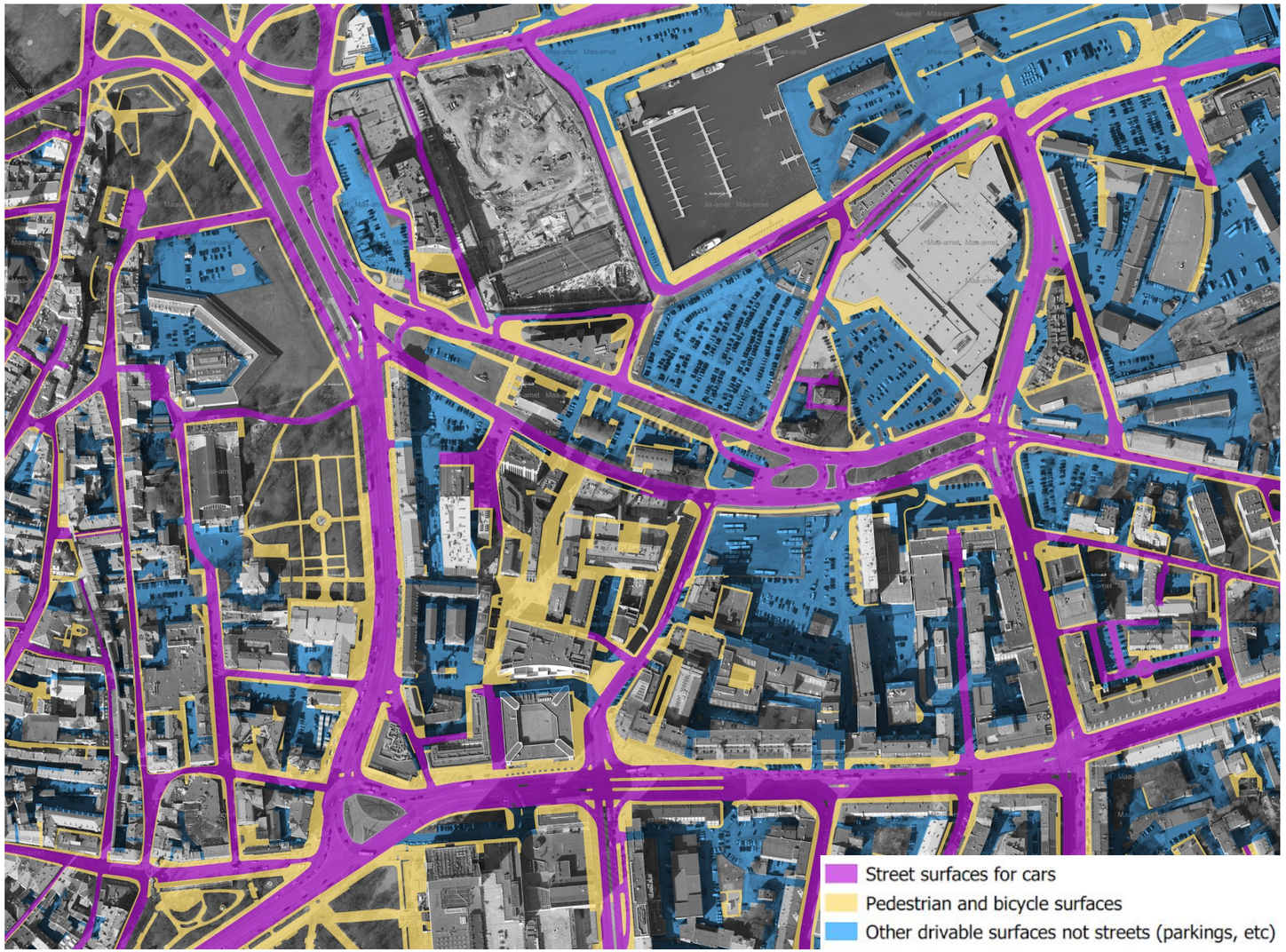
In the past decades, we have prioritised system and service optimisation. This led to making tangible infrastructures dominating the urban space.

A rather advanced smart city like Tallinn, focusing on tangible capital is resulting is a condition of spatial injustice.

As for today, in the city, there is on average twice the amount of tarmac for cars and parking spaces than for residents.

On average, optimising mobility infrastructures led to a situation where the surface dedicated to vehicles is double the total floor area for residencies.

JUST DISTRIBUTION OF SPACE GENERATES VALUES



Applied for the developed of a new parking normative in Tallinn

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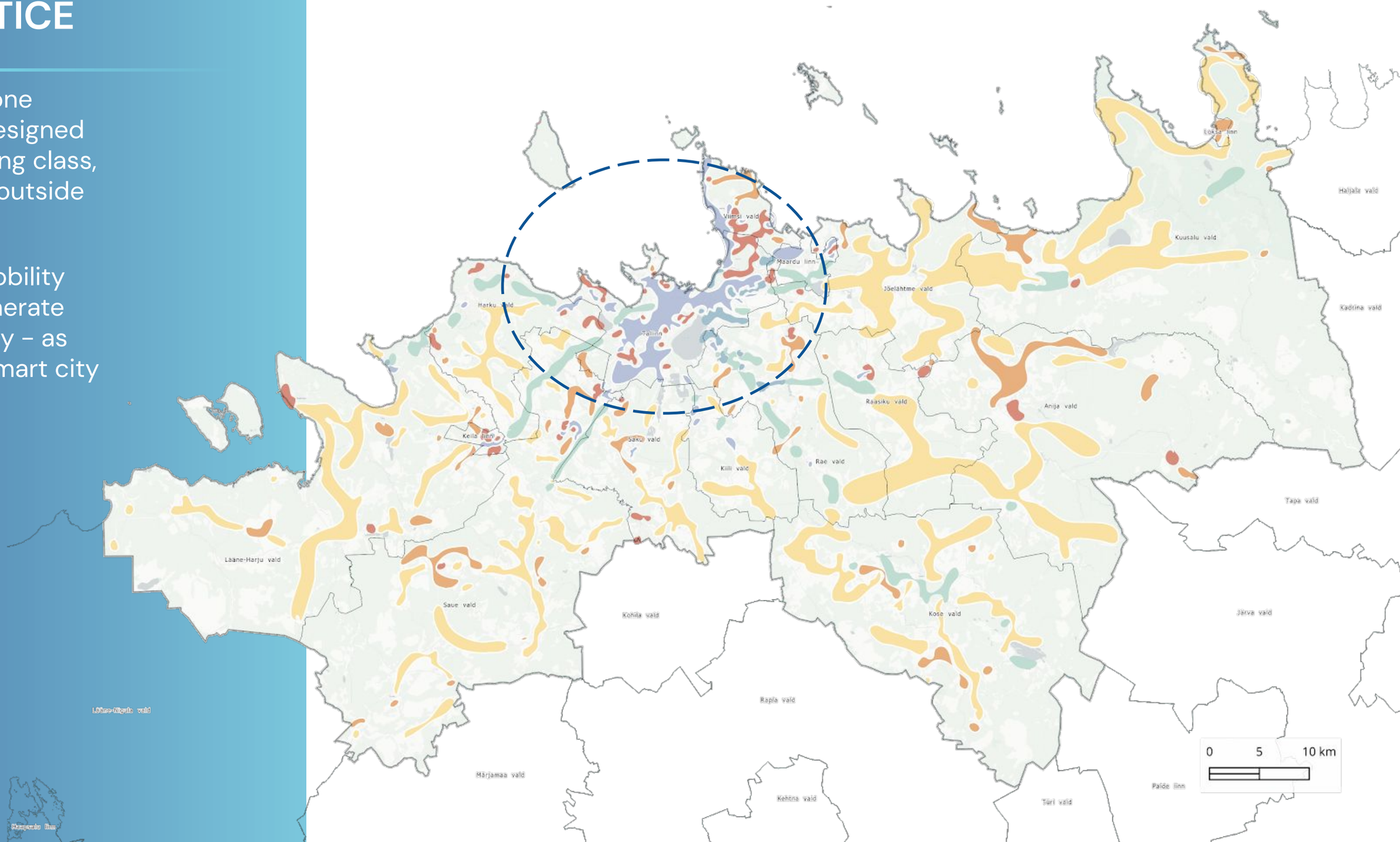
OPTIMISATION GENERATING MOBILITY INJUSTICE

Optimisation is seldom done across scales. Transit is designed to support the male working class, not women's movements outside peak-hours

Increased efficiency of mobility service in a smart city generate mobility injustice regionally - as not all cities can deploy smart city solution

EQUITY IN MOBILITY GENERATES VALUES



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OPTIMISATION MAKE CITIES LOSE DIVERSITY OF ACTIVITIES

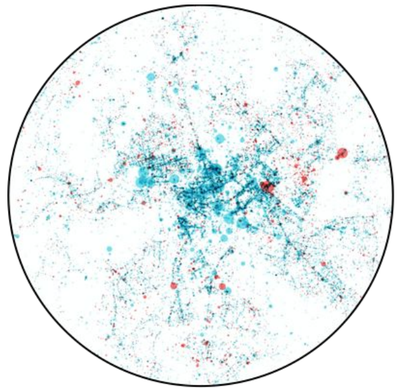
In a project financed by the Academy of Finland, we have mapped all urban amenities, services and retails in over 100 cities across Europe. Using crowdsourced data we can get the real feeling of the city.

We observed that the expansion of franchise stores is decreasing diversity at the street level and reducing the possibility of being in the city without paying for experiences.

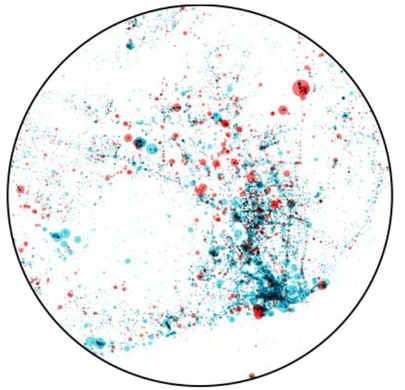
DIVERSITY GENERATES VALUES

	HEL April	HEL Sept
Food	7,94	6,53
Coffee	4.75	4,67
Art + Entert	7.56	7,54
Supermarket	2.57	2,27
Food/Drink store	4.57	4,36
Bars and clubs	7.65	7,65

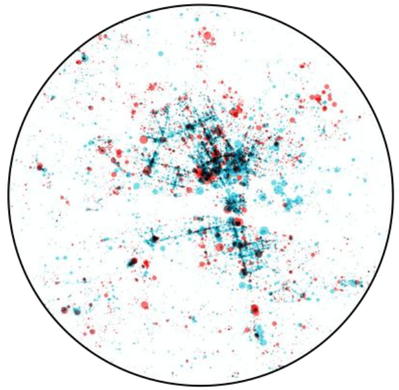
"In Helsinki the diversity of services and activities has declined due to the growth of chain stores."



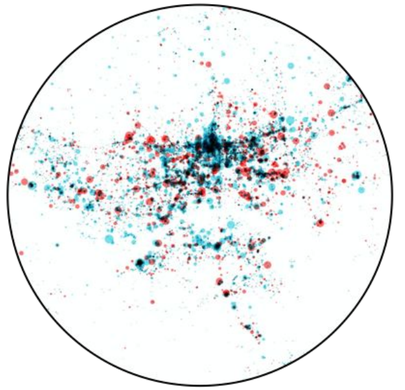
Rome



Lisbon

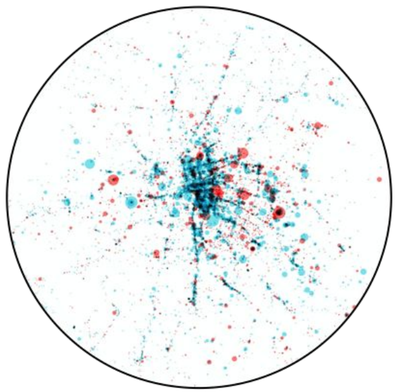


Stockholm



Zagreb

Amsterdam



Dublin

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THE CULTURE OF MONITORING AND OPTIMISING

The culture of monitoring and optimising is driven by the technological promise of spread across sectors.

It is hindering the capacity for in-house innovation and in the long term the ability to execute projects during transformation.

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WE ARE LOSING THE CAPACITY TO SCALING AND EXECUTE INNOVATIVE IDEAS

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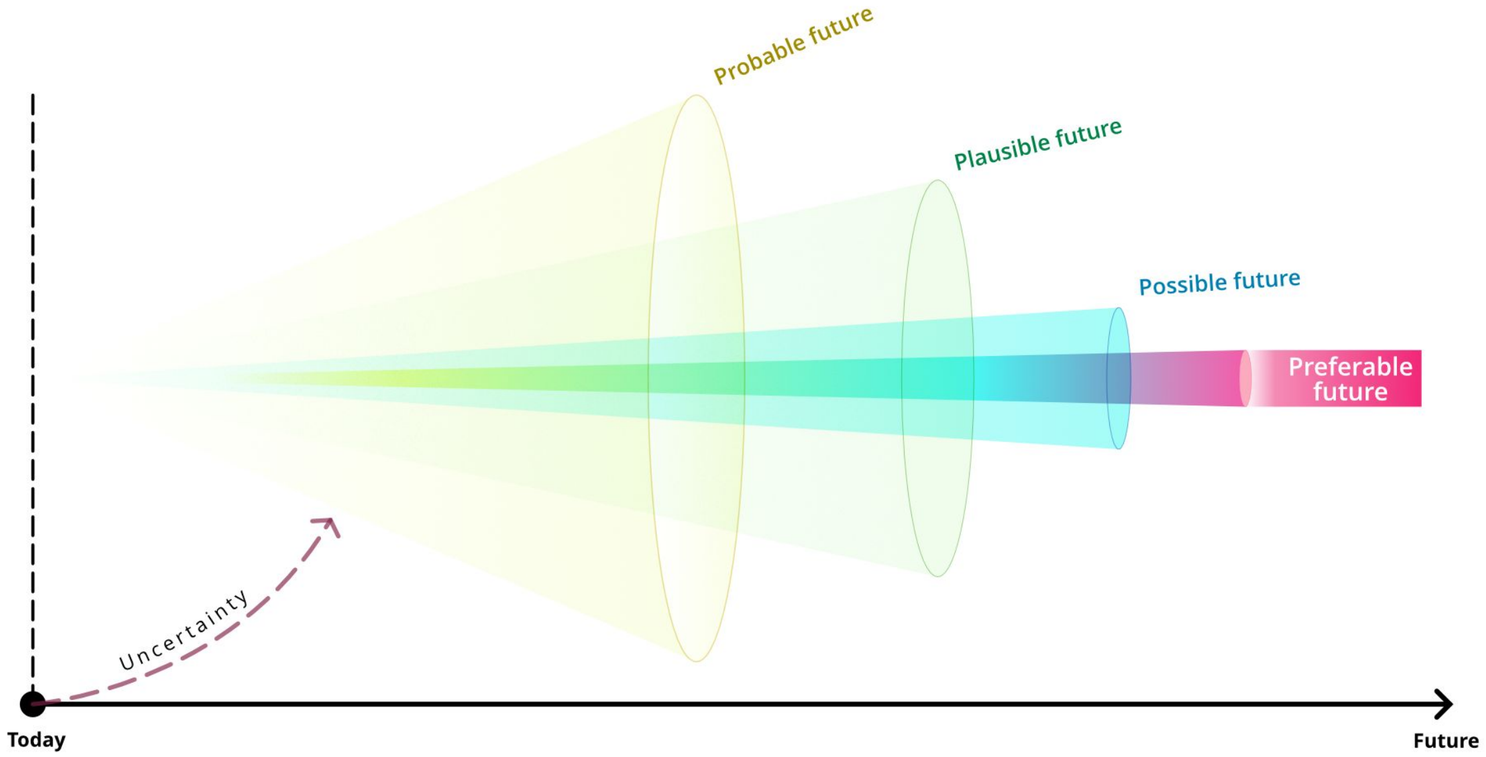
IS THIS STILL A VALID MODEL FOR THE FUTURE?

Long term thinking is valuable for scenario planning before and after the transition. But now we are living the transition, now we are living one of the scenarios mapped during the past decade. To increase our level of confidence in our operations plan investments, we use foresight to imagine al probable futures and scenario planning to map all plausible futures. Past and present data are commonly used in forecasting and data-based scenario to make informed guesses.

Yet, in a period of transformation, we need a new approach that focuses on transition strategies first that is not based on data that is biased by governmental restrictions to human behaviours. In other words, we need to move from a model that tries to look into the future to a strategy that brings people together to reimagine what the future is.



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STRUCTURAL BIASES IN DATA DURING COVID

Projections based on human behaviours observed in 2020 are more of a liability than a resource as all human preferences and choices were under the direct control of national and local authorities. These were not spontaneous and genuine behaviours.

We need to avoid structural biases in data and data collection practices in favour of social imagination, to plan for a just and equitable transition.

Numerous scenarios and projections were made for the real estate market based on the increased use of green areas during covid. Yet, this is exactly the type of data that contains a structural bias. After half year we can observe that a situation that is back to normal.

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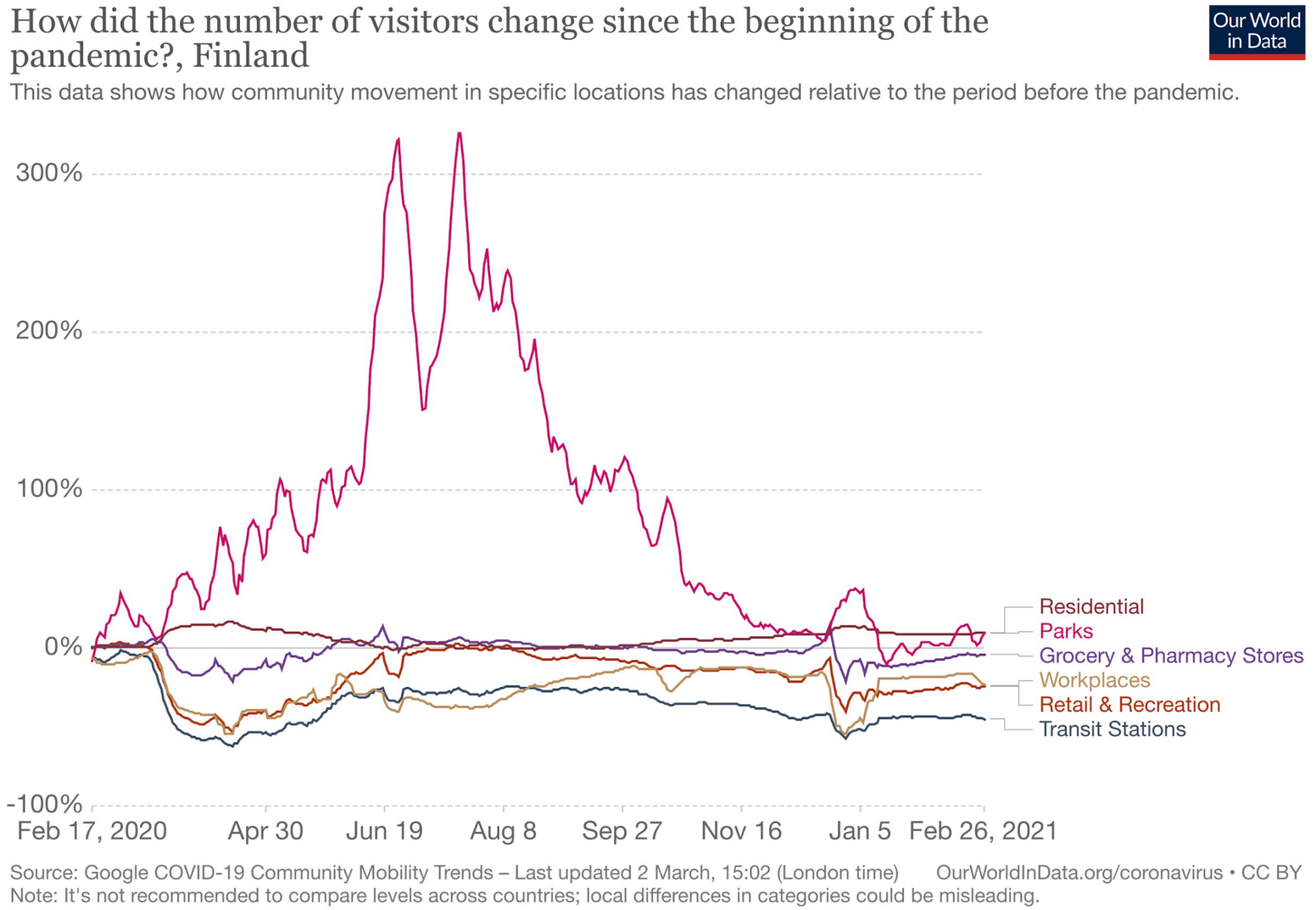
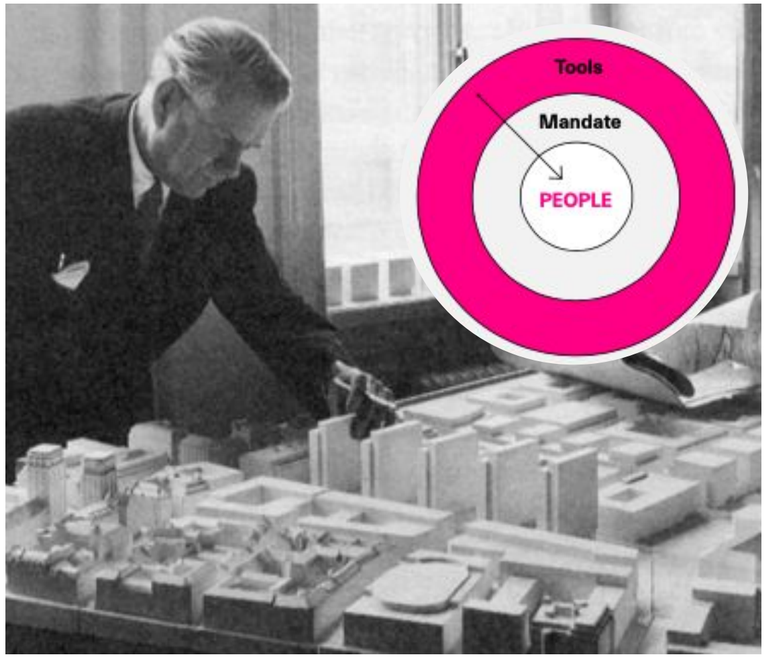
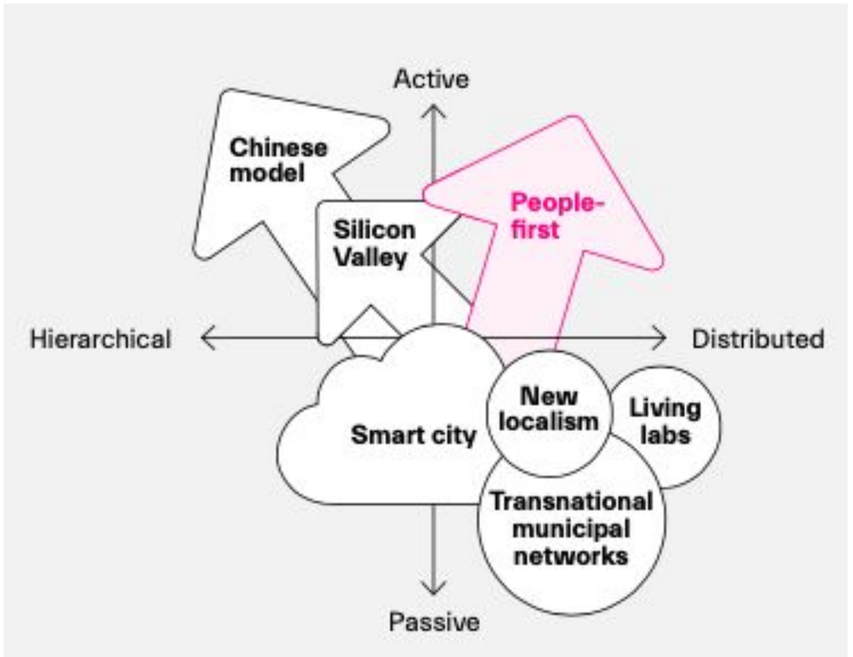


A PEOPLE-FIRST APPROACH TO REGENERATIVE CITIES





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A PEOPLE-FIRST APPROACH TO REGENERATIVE CITIES

Thought leaders on urban innovation and creativity

The overdetermination of functions reduces the complexity of a place and decreases the probability of unplanned activities.
Richard Sennet

the Creative Economy is driven by the logic that seeks to fully harness human resources and talent.
RIchard Florida

creativity, and innovation are required to resist the shocks of the political, social and economic stresses of the modern world.
Richard Sennet

The vibrancy and the culture provided by public public activity clusters are necessary for the growth of intangible economies
Haskel and Westkale

Cities have the capability of providing something for everybody, only because, and only when, they are created by everybody.
Jane Jacobs

Innovation needs to be in the company of imagination.
Tricia Wang

Innovations happens in the neighbourhoods and cities are their breeding ground.

People need spaces of interaction and agency to reshape their cities

Decrease optimisation in favour of experience to rekindle meaningful relationships and partnerships**.**

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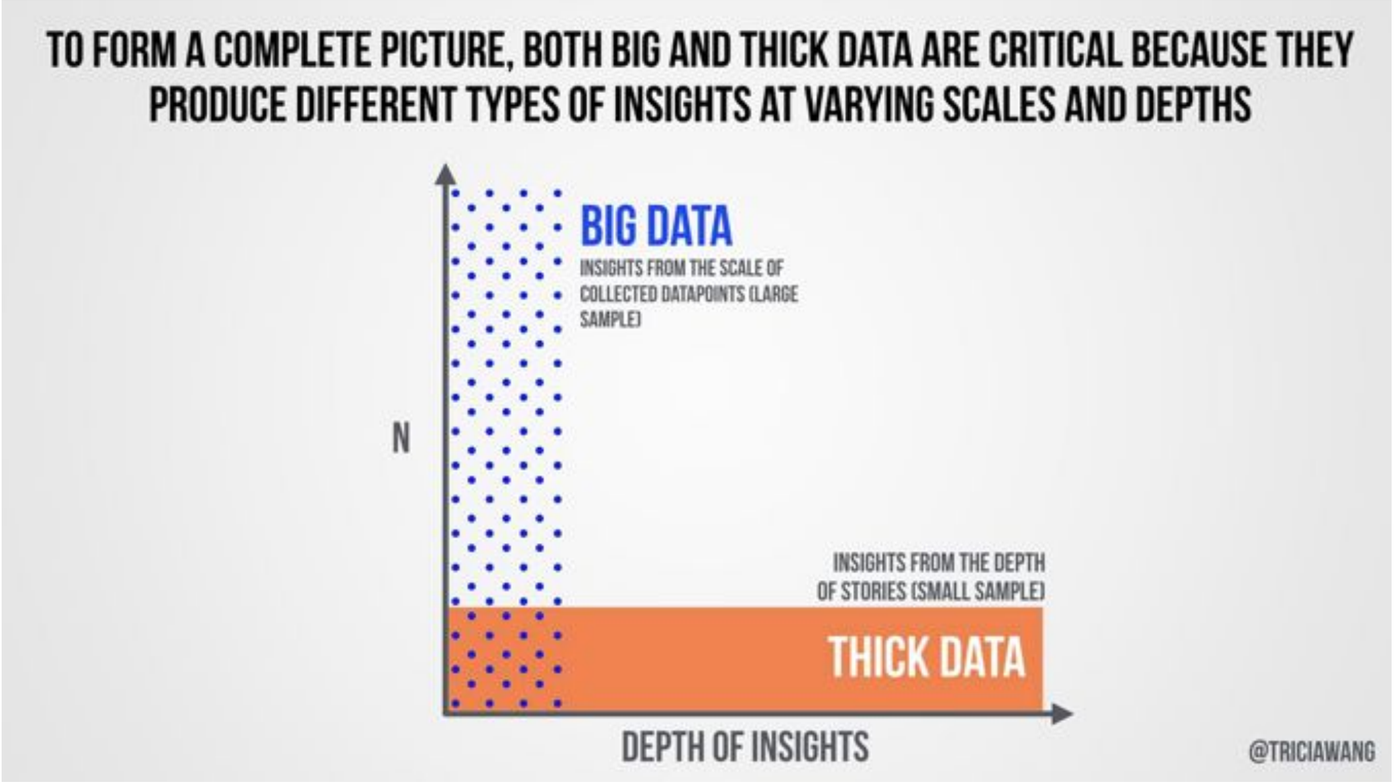
FROM BIG DATA TO THICK DATA

It doesn’t matter how much data we have...

if it doesn’t matter to people

Context-rich data brought to light using qualitative, ethnographic research methods and analysis that uncover **people’s emotions, desires, and mental models of their world**.

PULSE LAB JAKARTA



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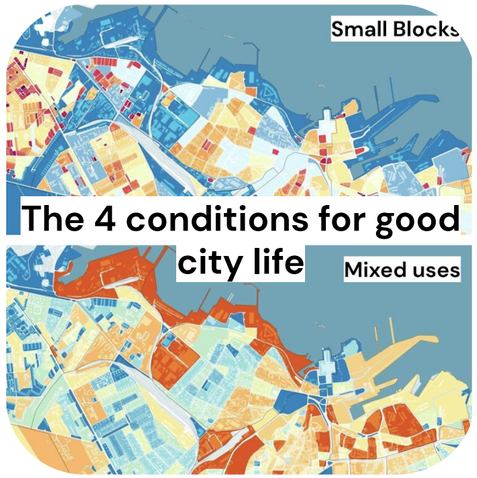
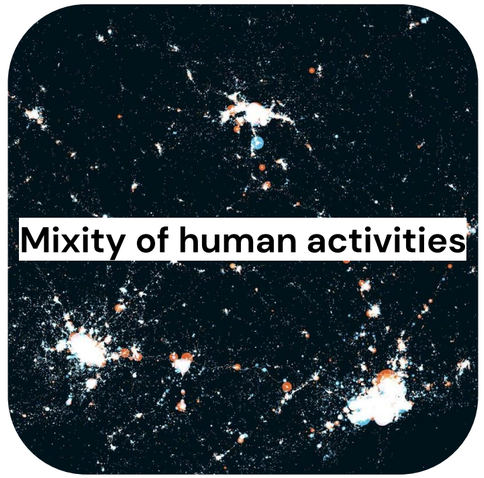
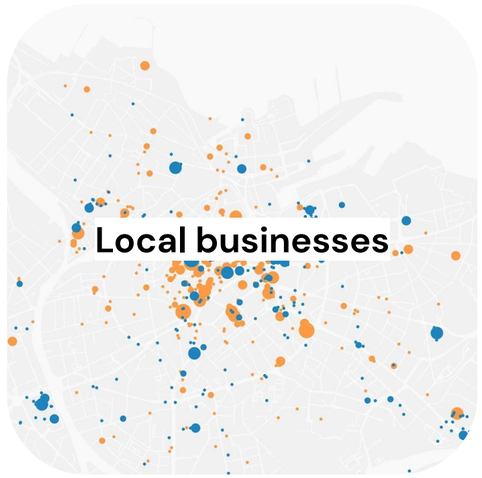
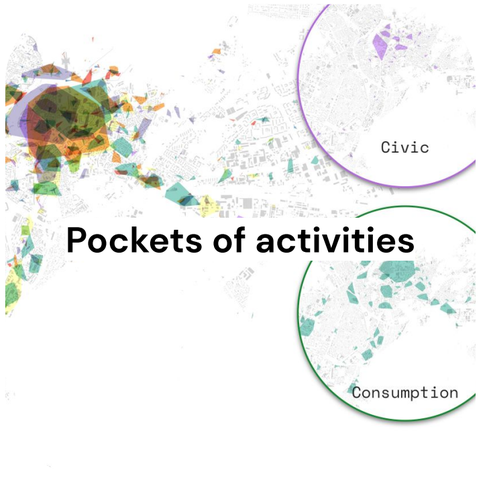
A PEOPLE-FIRST APPROACH TO REGENERATIVE CITIES









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Mobility injustice is a process through which spatial design and service provision can generate social and economic inequality.

Mimi Sheller

DEMOS HELSINKI

A PEOPLE-FIRST APPROACH TO REGENERATIVE CITIES

OUR TASK
There are many studies on transit and mobility but only a few ones that focus on the stops. **This project is about gaining high-level knowledge about transit stops and stations in Harju county.**

OUR CHALLENGES
Generalising knowledge about nearly **3000** stops across the region. Most **studies and strategy documents usually focus on one transport mode only.** The challenge of this project is to take **all transit modes into account** (train, tram and bus).

OUR APPROACH
We utilise a **capability approach** to study the mobility equity provided by public transit stops in Harju county. It **is about addressing problems related to the uneven or unjust distribution** of mobility services and the accessibility, safety and comfort of transit stops and stations.

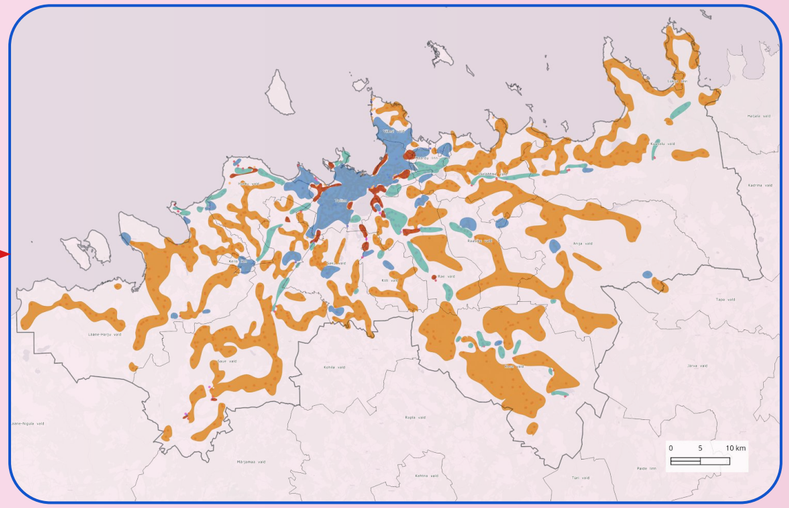
DATA ANALYSIS
2917 stops and stations

19 metrics to map
Service performance &
Potential demand

Mobility equity

SITE ANALYSIS
64 stops

Mapping accessibility, safety and comfort on site.



The knowledge produced in this project can be utilised to:

- ➔ Establish benchmarks for stops and stations
- ➔ Set service-development priorities
- ➔ Initiate debate and activities for shared public-transport stops roadmap between municipalities

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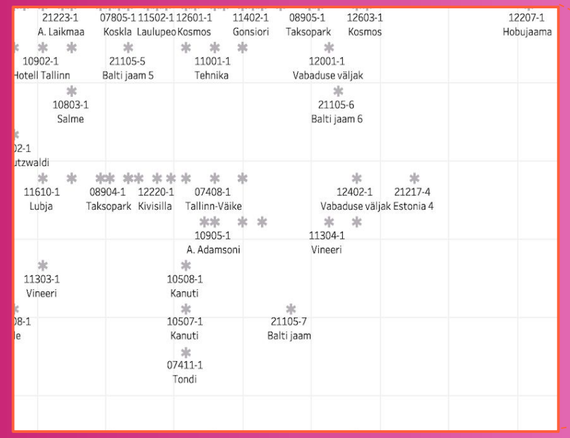
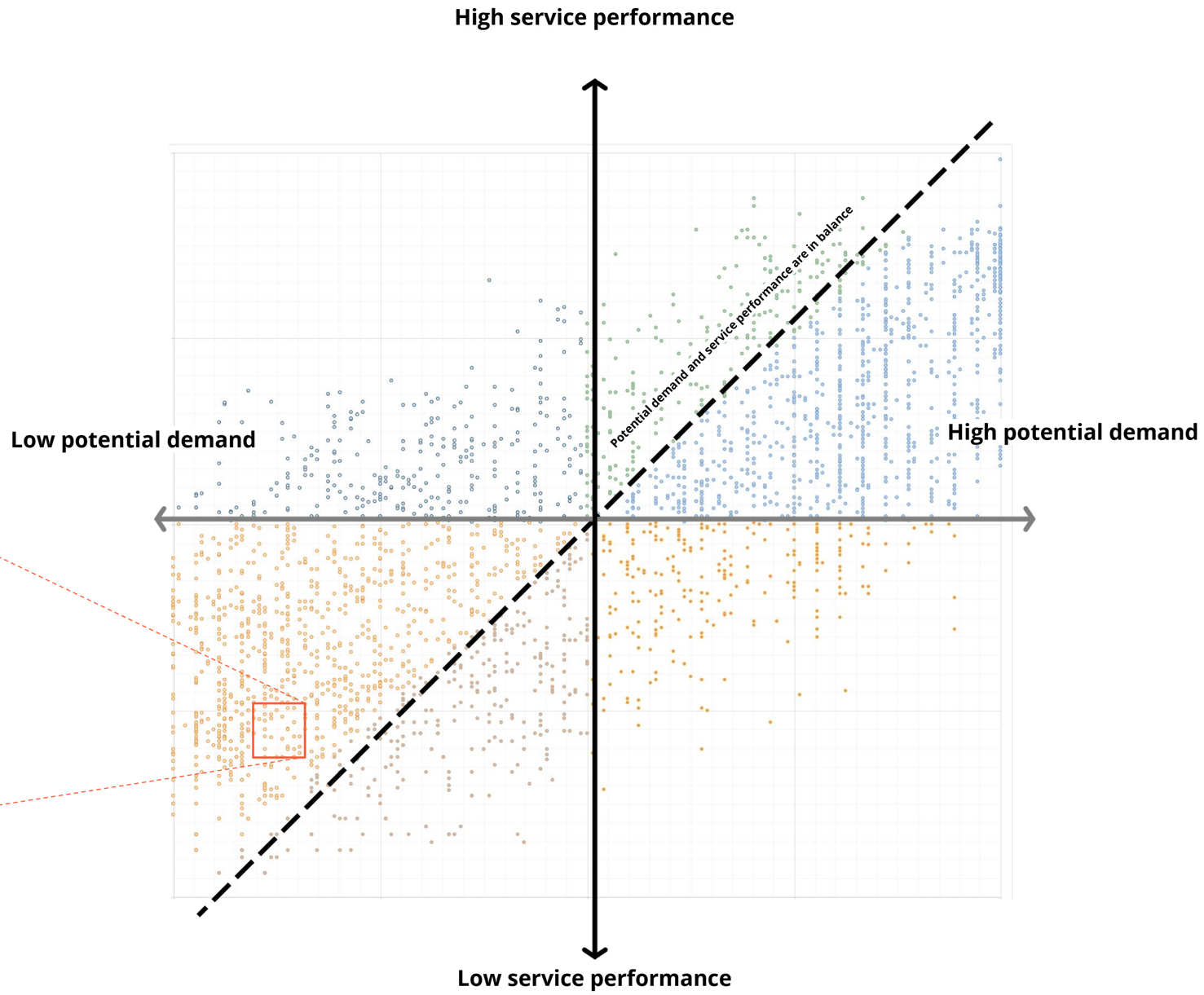
MOBILITY EQUITY

To categorise each stop based on their mobility equity level, we have normalised the values from the Service Performance and Potential demand and plot them in the equity graph. The diagonal line shows the balance between Service performance and Potential demand



Each dot indicates one stop in Harju County (incl. Name and stop code).



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MOBILITY EQUITY

Stops and stations are classified into 6 categories based on their level of service performance and potential demand. This model provides a high-level understanding of the current condition of all stops.

This classification of stops provides decision-makers with the knowledge they need to start prioritising further strategies to increase mobility equity and future investments.

Ultimately, the typologies will be displayed on a series of cartographies that we call Equity Maps. The main use of these maps is to visualise where different categories of stops are clustered. This visual information is utilised to review the equity gap between areas with the high service performance and those with low.

Equity maps can be used by policymakers and place leaders to start bridging the mobility equity gap and reduce mobility poverty - starting from these areas with potentially high demand but low service performance.

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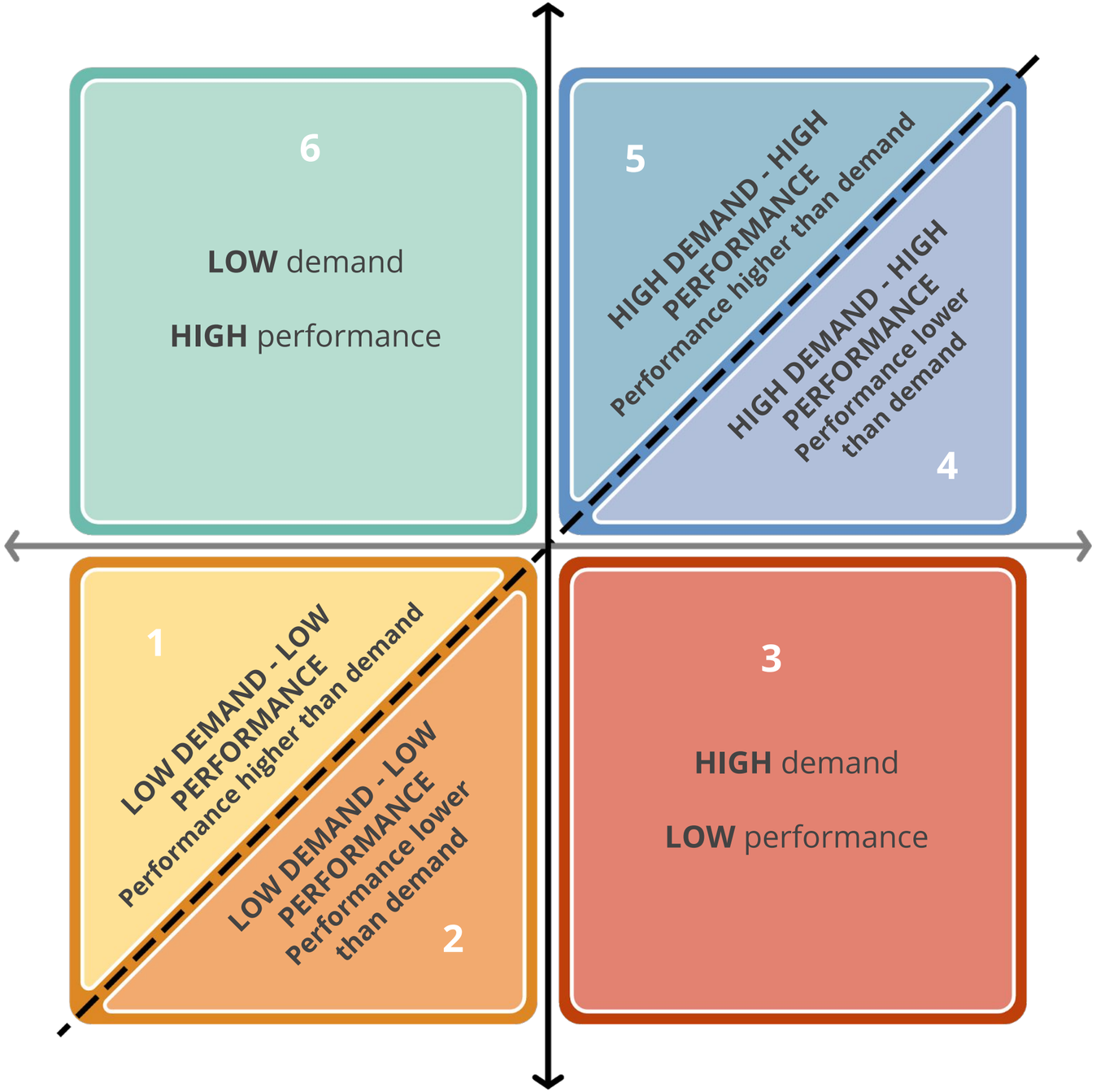


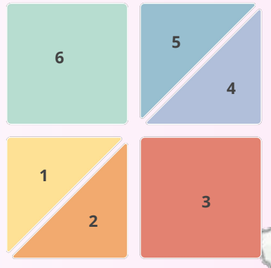
The equity map of Harju county shows a clear divide between zones of high service performance (categories 4 and 5) and zones of low service performance (categories 1 and 2).

92% of the country stops are in categories 1, 2 and 6.

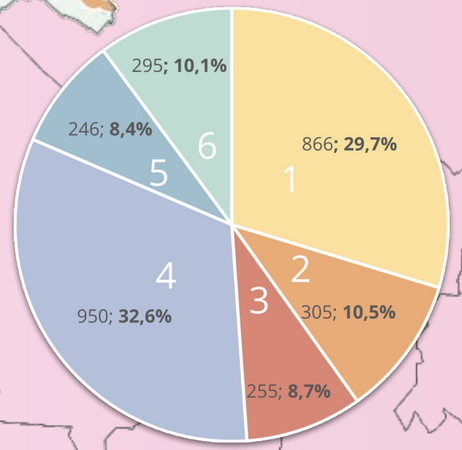
93% of urban stops are in categories K3, K4, K5.

Small town stops are relatively evenly distributed between different categories.

Project stakeholders were also provided with an interactive version of the equity map.



1. **LOW DEMAND - LOW PERFORMANCE**
   a. **Performance higher than demand**
2. **LOW DEMAND - LOW PERFORMANCE**
   a. **Performance lower than demand**
3. **HIGH DEMAND - LOW PERFORMANCE**
4. **HIGH DEMAND - HIGH PERFORMANCE**
   a. **Performance lower than demand**
5. **Better quality stops needed**
6. **Large potential user base**



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MOBILITY EQUITY – QUALITATIVE ANALYSIS

Stops are the business card of the public transport system – the place where every trip begins, ends or continues.

Combined insights from the site analysis

53% of stops do not have shelter.

69% of stops do not have comfortable seating for all passengers.

53% of the stops do not have the possibility for park and ride.

Bicycle parking is not available at 58% of the stops.

92% of the transit stops have incomplete signage and maps, or they lack indications to other stops nearby. When present, the readability of the information (such as timetables) was often compromised by the weather or vandalism.

The path between one transit stop and connecting stops nearby was safe and accessible only in 14% of the sites we visited.

https://kuula.co/post/78FTz/collection/7PcXG

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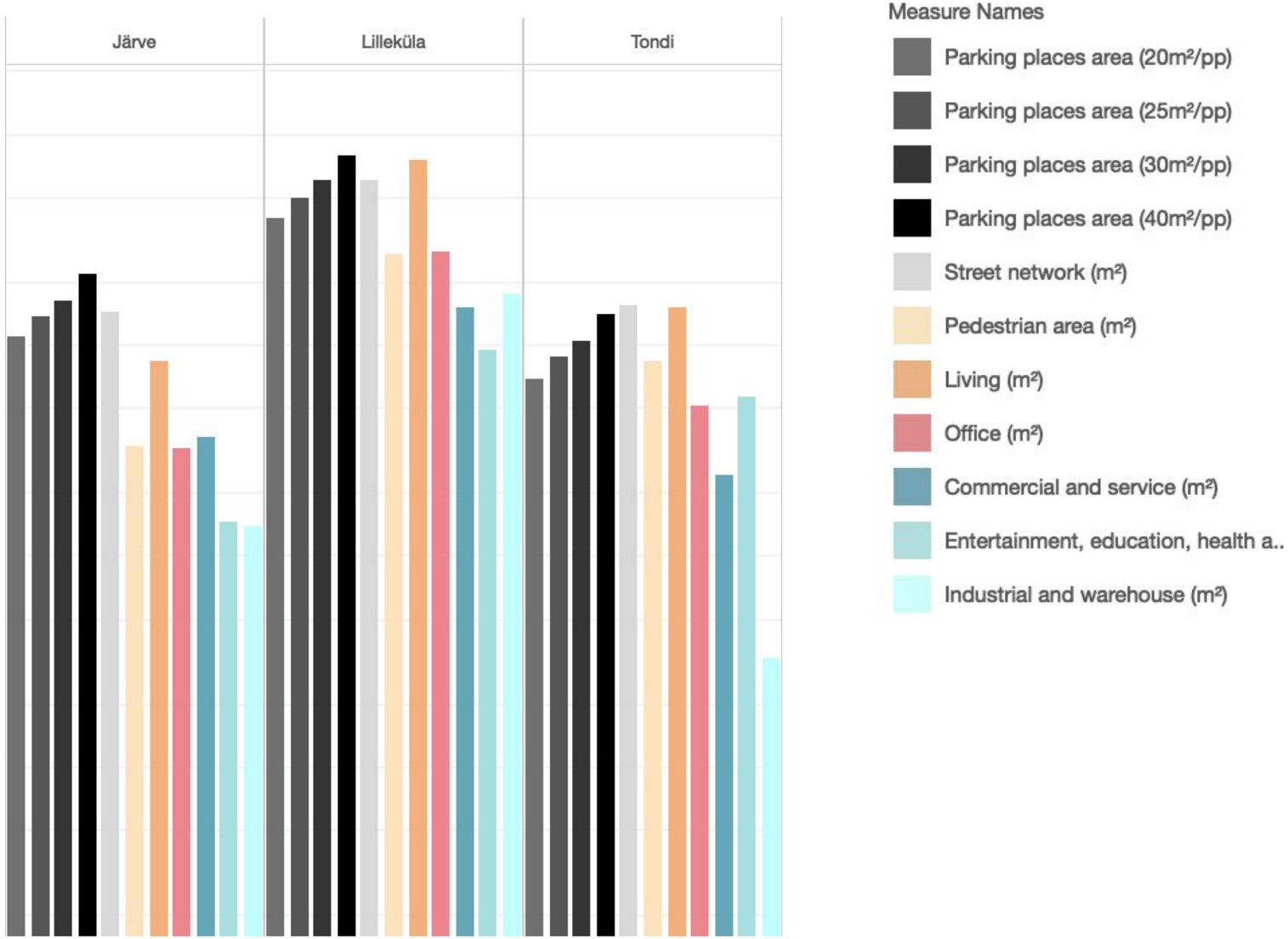
The right to the city is far more than the individual liberty to access urban resources: it is a right to change ourselves by changing the city.

David Harvey

DEMOS HELSINKI

SPECIALISATION IN SMART CITY



Applied for the developed of a new parking normative in Tallinn

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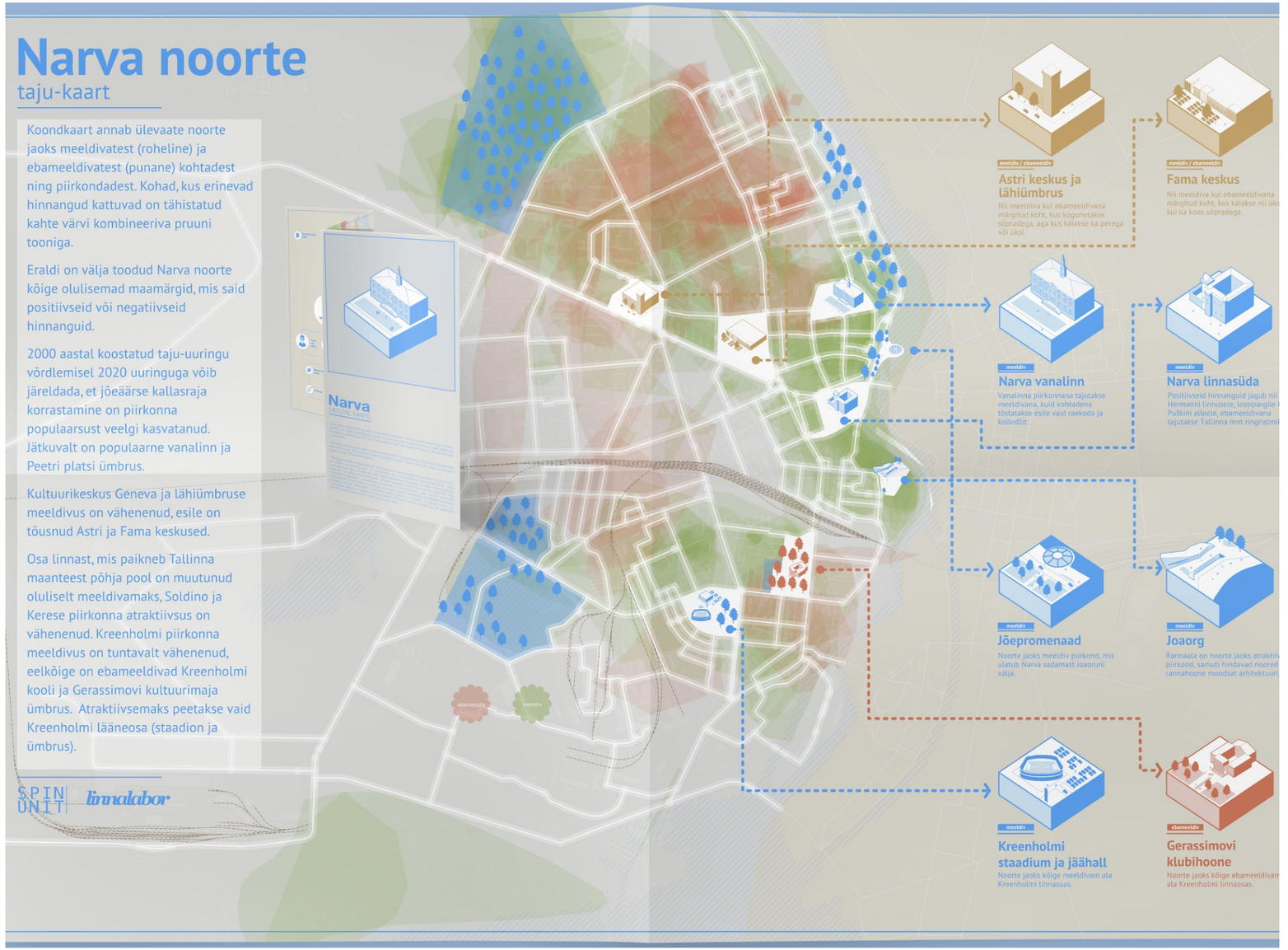
A good environmental image gives its possessor an important sense of emotional security. He can establish an harmonious relationships between himself and the outside world.

Kevin Lynch

DEMOS HELSINKI

THE IMAGE OF THE CITY



Applied to the strategic planning of the City of Narva

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THE IMAGE OF THE CITY

Workshop

Image group name	Image ID	Count of School
Infrastructure (f)		82
	1	19
	4	19
	8	16
	5	15
	12	13
Buildings (b)		86
	33	19
	43	18
	1	17
	21	16
	27	16
Park (p)		88
	12	22
	5	20
	7	17
	1	16
	3	13
Streets (c)		102
	44	23
	17	15
	26	15
	3	13
	47	12
	33	12
	28	12
Public space (e)		86
	16	20
	19	19
	21	17
	12	15
	6	15
Mobility (m)		85
	4	20
	8	17
	5	17
	7	16
	3	15

AI analysis of responses

Most preferred pictures

Vision

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THE SHARED VISION OF THE CITY

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First life, then spaces, then buildings – the other way around never works.

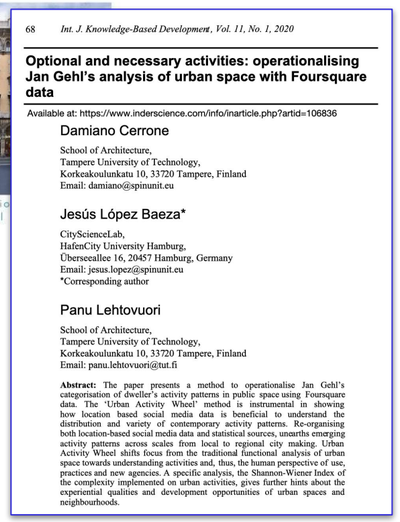
Jan Gehl

DEMOS HELSINKI

Jan Gehl / Mixed human activity patterns

Optional activities
Taking a walk by the river, jogging in the park, sun bathing, eating out

Necessary activities
Going to work, to school, doing the groceries



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Optional and necessary activities: operationalising Jan Gehl's analysis of urban space with Foursquare data

Available at: https://www.inderscience.com/info/inarticle.php?artid=106836

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Abstract: The paper presents a method to operationalise Jan Gehl's categorisation of dweller's activity patterns in public space using Foursquare data. The 'Urban Activity Wheel' method is instrumental in showing how location based social media data is beneficial to understand the distribution and variety of contemporary activity patterns. Re-organising both location-based social media data and statistical sources, unearths emerging activity patterns across scales from local to regional city making. Urban Activity Wheel shifts focus from the traditional functional analysis of urban space towards understanding activities and, thus, the human perspective of use, practices and new agencies. A specific analysis, the Shannon-Wiener Index of the complexity implemented on urban activities, gives further hints about the experiential qualities and development opportunities of urban spaces and neighbourhoods.

Chapin and Brail (1969)
Work related; Socializing; Home working; Recreation/relaxation

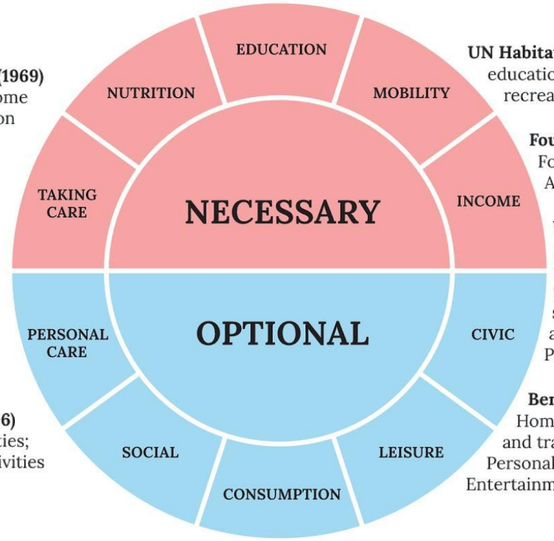
Gehl (1971)
Necessary; Optional; Social

Francis (1991)
Travel; Shopping; Interaction

Simon (2000)
Movement; Rest; Encounter

Gehl (2002)
Traffic; Commercial; Leisure

Mehta (2006)
Stationary and sustained activities; Lingering activities; Social activities



UN Habitat
education, health, culture, welfare, recreation, nutrition

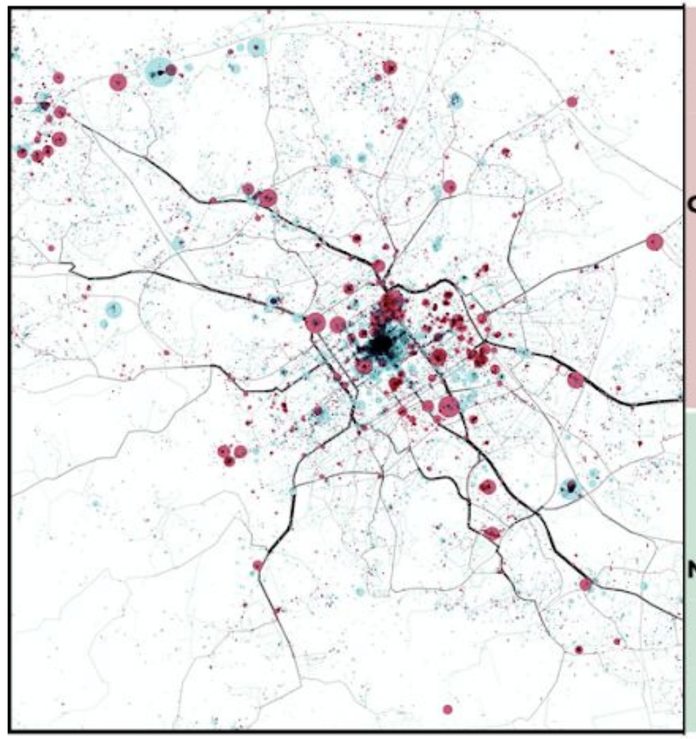
Foursquare
Food, Work, Shops, Travel, College, Arts, Nightlife, Park

USA Energy admin
Office; Warehouse and storage; Service; Mercantile; Religious worship; Education; Food service; Food sales; Public assembly; Lodging; Health care; Public order and safety

Ben-Akiva and Bowman, 1998
Home. Work. School, Transportation and transitions, Shopping/errands, Personal business, Recreation/ Entertainment, Civic/religious, Other

DEMOS HELSINKI

Mapping all urban amenities, informal uses included



Optional

Necessary

Leisure

Mobility

Income

Social

Consumption

Personal Care

Education

Nutrition

Taking Care

Civic

College Classroom

Playground

Salon / Barbershop

School

Café

Park

Neighborhood

Other Great Outdoors

Bus Line

Automotive Shop

Daycare

Bar

Parking

Pizza Place

Gym

Grocery Store

Gas Station

Event Space

Assisted Living

Restaurant

Furniture / Home Store

Housing Development

Boat or Ferry

Factory

High School

Dog Run

Cafeteria

Conference Room

Medical Center

Tech Startup

Nightclub

Hardware Store

Plane

Tram Station

Soccer Field

Spa

Coworking Space

Beach

General Entertainment

Gym / Fitness Center

Trail

Government Building

College Auditorium

Dentist's Office

Coffee Shop

Non-Profit

Harbor / Marina

Convenience Store

Clothing Store

Garden

Art Gallery

Church

Bridge

Taxi

Lounge

Scenic Lookout

East Food Restaurant

Sauna / Steam Room

Hospital

Flower Shop

Train

Pub

College Cafeteria

Lake

Recreation Center

Bank

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