From making the city to using the city
The infrastructure of everyday life

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@cityofsound
medium.com/@cityofsound
Original plan for Gamla Enskede, Stockholm (1905)
Gamla Enskede, Stockholm (2019)
Tio byggnader som definierade 1960-talet (2018)

...rad lägenhet. Men enfamiljshuset fanns hela tiden i bakgrunden, som en del i den aktiva politiken, redo att kliva fram som det attrativa målet för den strävsamma arbetaren.


Journalisten och debattören Ulla Molin hörde till dem som protesterade mot det svenska folkhemsprojektets vilja att skilja människorna från marken i höga hus. Enligt höghusförkärna skulle ett stadsbyggande stolt människor skapa nya områden och inte förvandla staden. Även på H55 gav det en annan tonsättning.
Technology is the answer. But what was the question?

Cedric Price
1966
We don’t make cities to make technology, buildings, infrastructure. We make cities for culture, community, commerce, conviviality, enabled by the infrastructure of everyday life.
Super-local microgrids, with renewable energy, battery storage and shared ownership.

Cooperative design, build and ownership of dense and diverse neighbourhoods.

Privacy-preserving yet public decision-making platforms, with discourse and data.

Circular, natural materials for buildings, products and infrastructure, with local loops.

Everyday services via active transport, reduced & fossil-free long-range connections.

Shared and public local mobility services, autonomous and otherwise.
Tech Envisions the Ultimate Start-Up: An Entire City

Silicon Valley wants to save cities. What could go wrong?
Do transportation network companies decrease or increase congestion?, Science Advances, May 2019

Smart city tech makes things worse, without inventive, capable, responsible, engaged and participative governance, design, and shared ownership.

Uber and Lyft increased traffic delays in San Francisco by 40 percent

Uber and Lyft drivers are on strike to demand regulated fares and livable wages, in the lead-up to Uber’s initial public offering on the stock exchange on 10 May. Now there is some more bad news for these services: they haven’t lived up to claims of reducing traffic congestion.
Individual Service

?
Oslo Bysykkel
2015—
Oslo Bysykkel
2015—
Always design a thing by considering it in its next larger context—a chair in a room, a room in a house, a house in an environment, an environment in a city plan.

Eliel Saarinen
Strategic design

Shifting lenses

Emphasis on engaging with the systemic impact either side of the question at hand.
You have to anticipate the situation created by AVs in the cities in 2030 and design the rules of the game between now and 2020, in order to explain to the car builders and the service providers the rules of the game. We should announce, before 2020, that in Paris, no private owned AV will be allowed; it will be only mobility as a service; not mobility as ownership. Otherwise, you have the strategy of the car manufacturer.

Jean-Louis Missika, Deputy Mayor of Paris, June 2017
Affordances for shared AV

Getting Around
Sharing an AV
Design questions at scale

Will Anna trade off time against money?

Will she share a small vehicle with strangers?

How do we enable glanceable interactions, without cellphones?

How to make legible machine learning systems in edge networks?

How to coordinate on-demand vehicles on the street?

What is the interplay with public transport networks?
WIFI & SENSOR TOTEM

Digital Backbone

PUBLIC WIFI
Compact Parking

Rotated & Compacted Parking

Cycle Lane
Mobility Options

- BIKESHARE HUB
- RIDESHARE PICKUP POINT
- LOCAL SHUTTLE
- WAITING BENCH
All Iterations

- Trees
- Playground
- Seating
- Shared surface
- Greeneries
- Bike rack
- Planters
- Grass
- Bikes share hub
- Rideshare pickup point
- Waiting bench
- WiFi & sensor totem
- Local shuttle
- Public WiFi
- CAFE

ARUP
Today

Near-future

Note: Initial investments need only minimal capital and operational expenditure.

Digital backbone

Unlocks space

Test mobility options

Re-green

Shared surface

Flexible active program

Note: expensive elements are deployed as revenue can cover them (via increased value of rent and business, and reduced costs, via better health, safer streets etc.)

Example strategy for healthy streets demonstrator
Adaptable parking strategy. Adaptation using the time that a major development takes as an advantage rather than disadvantage, various strategies for ‘disappearing parking’ emerged for Sluisbuurt, capable of unlocking far more value than parking space produces. Each relies on applying downward pressure on the demand for private cars, by offering better ‘mobility-as-a-service’ options, running active campaigns for sustainable mobility (and the public realm that it would free up), and engaging in collaborative decision-making with the communities. Iterative development and forward-looking architecture enables this approach. These design strategies have subsequently been incorporated into Sluisbuurt’s planning guidelines.

Sloterdijk and Sluisbuurt

Gemeente Amsterdam and Arup, 2016–18
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Sloterdijk and Sluisbuurt

Gemeente Amsterdam and Arup, 2016–18
INLEIDING

Ambitie
In de Sluisbuurt is een integraal strategie nodig op het gebied van mobiliteit, specifiek met betrekking tot parkeerplaatsen. Zeer ongunstig (ZBE) waar Sluisbuurt op 5.500 (3.44%) woningen en voorzieningen zal huizen, is er momenteel voornamelijk bereikbaar met de auto. De Ubilagplaats en Zuiderspoor),(ontwikkelingen, en doorbraken, het eiland waardoor verschillende buurten van elkaar zijn gescheiden. Naast de auto komen bezoekers deze buurten bereiken middels OV (tram 26) en met de fiets. In de plannen voor Sluisbuurt moeten zowel deze mobiliteitsdimensies binnen de ZBE tegelijk. Deze worden dan ook optimaal gemaximeerd en optimaal beheerd, en daarmee ook het parkeren, wordt gedeelde. De gemeente kan in de Sluisbuurt over het gehele gebied starten en de ruimtelijke uitwerking van een parkeringsstrategie kan volledig in het kader van de toekomstige Sluisbuurt aansluiten op een eenduidige ambitie. Dat is in essentie een ambitie om zo min mogelijk parkeerplaatsen te realiseren in Sluisbuurt. Het wonen/werken in de Sluisbuurt betekent geen (primeur) afwezigheid van de auto. Dit leidt in dat ZBE in grotere mate beter bereikbaar moet worden.

Mobielheidsstrategieën en intervenes dienen daarom het domineren van autogebruik te onderbouwen door en bijvoorbeeld deelstroomsysteem te faciliteren. De Sluisbuurt wordt een fietsbuurt.

Mobielheidsstrategieën als opties
In de parkeringsstrategie is het einde van het gebruik van het autogebruik. Echter is dit niet doelmatig van het parkeren, de gedeelde. De gemeente kan in de Sluisbuurt over het gehele gebied starten en de ruimtelijke uitwerking van een parkeringsstrategie kan volledig in het kader van de toekomstige Sluisbuurt aansluiten op een eenduidige ambitie. Dat is in essentie een ambitie om zo min mogelijk parkeerplaatsen te realiseren in Sluisbuurt. Het wonen/werken in de Sluisbuurt betekent geen (primeur) afwezigheid van de auto. Dit leidt in dat ZBE in grotere mate beter bereikbaar moet worden.

Kern van de opgave
Als reactie op het Stadsbestuurkundig Plan heeft de Gemeenteraad op 6/10/2015 in een amendement besloten om het punt van parkeren enkel te zetten. Dit betreft de huidige fase van de parkeerplaatsen in de openbare ruimte. Deze is vastgesteld: *Ruimtelijk

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Plug and learn

Based on the initial research and identification of opportunities in Phase 1, a selection of prototypes have been taken forward to schematic design. Each prototype is distinct in its function, but collectively they operate as a coherent family. They share a common material palette, creating a coherent user experience across campus, and share interchangeable components from the kit of parts menu. This includes the e-ink display prototype, which is designed to attach to and charge at the other prototype locations.

- Digital Wayfinding
- Study Pavilion
- Mobile learning space at Gate 8
- Food Cart
  - At Gate 8 and Monash Road
- Hoarding Modules
  - Interchangeable, multipurpose panels
Kit of parts
Scalable. A mobile food cart can be duplicated and deployed in clusters or individually.

Impactful. Mobile carts can provide food offerings at multiple locations around campus, and cover for any temporary closures of other cafes during construction.

Adaptive. The food offering can change, operators can change, it can be used by multiple operators over managed periods of time. It is portable and can be used to service different spaces or temporary needs (e.g. functions).


Cost effective. Inexpensive.
Democracy is a political system for people who are not sure that they are right.

E.E. Schattschneider
Cultures of decision-making
NIMBY to YIMBY

Make good things happen in your neighbourhood

1/ Start your project & build support  2/ Fund a project  3/ Volunteer your time  4/ Share your experience

Brickstarter is an open platform for community projects. You can use it to kickstart and coordinate your idea, get the community behind it, find professional help and advice, and gain financial backing from others.
Brickstarter / Helsinki Design Lab (2013)

Uusikioski
43% Funded
€1,432 pledged
17 days to go
» We will grow herbs on the roof and vegetables in the square behind, and serve you fresh, local produce with a smile.«

Aaltogrotto
62% Funded
€27,931 pledged
9 days to go
» A co-working space in the disused Aalto-designed stairs on Mannerheimintie.«

Baana Bike Repair
98% Funded
€9,942 pledged
52 days to go
» Infrastructure for Baana cyclists.«

Open Courtyard
83% Funded
€1,238 pledged
12 days to go

Tower of Power
12% Funded
€834 pledged
59 days to go
» PV cells on the roof: power the whole complex.«

Punkaharju wind farm
62% Funded
€18,634 pledged
39 days to go
» A community-owned wind farm of four turbines for the east Punkaharju area.«
Planning Notice
Arup x Ericsson
Like most British cities, our centre got rebuilt around the car in the decades. We will uncover and increasing access to the river, the Sheaf and the Porter Brook, to create smarter floodwater handling as well as better fishing! We are fortunate to have our station so close to the centre of the city, providing energy and movement to new spaces. The Italian University Masterplan proposes more concentrated energy in its central campus, around the Cultural Industries Quarter and Station, enabling that area further transformed into safe, pedestrian and cycle-friendly places.

SUCCESSFUL BUSINESS AND CULTURAL CENTRES. Now a planned approach us around Sheffield St and Pinstone St, uncovering the remains of the Port and hidden flowerings of flowers meadows to the river Don. We are kickstarting by extending the green corridors of high tech and cultural transformation will be helped by uncovering the remains of the castle and hidden flowerings of flowers meadows to the river Don. We are kickstarting by extending the green corridor of high tech and cultural transformation will be helped by uncovering the remains of the castle and hidden flowering water meadows to the river Don.
Baugruppen
More Than Housing, Zürich

Cooperative housing district

50 cooperatives.
13 buildings.
400 units.
35 retail + community units.
No public subsidy.
Rent 20-30% below market levels.
Nearly car-free.
Shared daily infrastructure.
2000 Watt society.
45% energy generated on-site.
4 hectares held back for future.
Strategic design

Participative design

Changes what you build. Places emphasis on ownership, care, maintenance, adaptation and incompleteness.
Future-proofing ArenAPoort / Arup x Gemeente
Amsterdam, 2017–18

ArenAPoort workshop
ArenA Poort workshop
Participation strategy

A participatory game to merge themes into concepts.

1. Theme it.
2. Priorise.
3. Spatialise.

A participatory game to combine spaces into buildings.
Sheffield central library workshop
Total Value Statement

Presenting three concepts — Benefit assumptions

Future value return

Investment

Current costs

[insert value/outcome here]

City centre increased property rates

Growth of local businesses

Broad range of social and cultural returns

[insert value/outcome here]

Decreasing costs of running other council services

Decreasing public health and social care costs

Decreasing sustainability environmental costs

Savings

Costs

Added value

Event and programming costs

General operational costs

Building maintenance costs

Total Investment Potential

Subtract current costs

Invest against future return
Royal Seaport remixed

Floating Pontoons
Easy Access to Water
Wildlife
STOCKHOLM
STADS VISION

Charging Infrastructure
Photovoltaic Roofs
Open Circulation
Bike Logistics
Adaptable Street Usage
E-Bike Charging Station
E-Ink Totem
Pop-Up Functions
Functions Spilling Out on Streets
Active Ground Floors
Agile and Adaptable Street Furniture
Activated roofs as Social Spaces
Multi-Use Basements freed of Parking
Sensor-fitted Lighting Poles
Water Drones

Stockholms stad / Arup, 2018

Royal Seaport remixed
Royal Seaport workshop
City design and delivery team

- Urban planner
- Community engagement
- Landscape systems
- Sociologist
- Architect
- Property market liaison
- User experience designer
- Policy design
- Data scientist
- Healthworker
- Digital systems specialist
- Business liaison
- Historian
- Artist
- Youth worker
- Project management

Stockholms stad / Arup, 2018
Ravintolapäivä, Helsinki
Ravintolapäivä, Helsinki
Ravintolapäivä, Helsinki

Seuraava Ravintolapäivä järjestetään sunnuntaina 17.02.2013.

Ravintolapäivä on karnevaali ravintola- ja ruokakulttuurin puolestaa.

www.restaurantday.org/fi/

Likes 31,975

Ravintolapäivä ja kaupallisus
Hyvät vastaanottajat
Lyhyesti: Emma jul

25 Friends
Like Ravintolapäivä

Write something...
Ravintolapäivä, Helsinki
Ravintolapäivä, Helsinki
Day after Ravintolapäivä, Helsinki
Antti Melasniemi neuvoo

Kohti omaa ravintolaa

Ravintolapäivity on liiankin kiinnostusta ravintovalmistukseen. Kokenut ravintolatutkija Antti Melasniemi antaa neuvontaa.

Sentimenttien ja perustavat ravintolaa

Maisteineen on mahdollista tavoitella ravintolaa, jossa tuote on kiinnostava ja asiakas on tilanneva, ja ravintolaa, jossa tuote on tehokas ja asiakas on tilanneva.

Harrastuksen tärkeyys

Ravintolat ovat tärkeää kulttuurin ja yhteisön kehittämiseen. Ne edistävät keskinäistä yhteisöä ja tarjoavat mahdollisuudet kokemutta ja ystävyyttä.

Ravintolat ovat tärkeitä

Ravintolat ovat tärkeitä yhteisön kehityksessä, sillä ne edistävät keskinäistä yhteisöä ja tarjoavat mahdollisuudet kokemutta ja ystävyyttä.
Open Kitchen, Helsinki
2014: Public Works department introduces “agile kiosk activities.” Specific areas in central Helsinki designated for food and coffee trucks, everywhere else agile kiosks can be operated quite freely.

2015: Public Works Department of Helsinki publicly states it “doesn’t want to hinder the popular event” offering only advice for restaurant keepers on tidiness.

2015: Helsinki’s Environment Centre, responsible for health inspections, adds specific chapter on Restaurant Day-type events, noting no hygiene requirements are imposed during the event, offering advice on organisation of pop-up restaurants.

2011: Police and Valvira (National Supervisory Authority for Welfare and Health) co-released statements reminding that the sales of alcohol remained prohibited outside actual restaurants.

2012: the same statement had transformed into a simple information bulletin for the event participants.

2013: no further statements were given.

2014: Streat Helsinki event (street kitchens/block parties for 20,000 visitors); associated conference by City’s Food Culture Strategy team.

2015: City hires Restaurant Day founder Timo Santala as head of Food Culture Strategy team.
Building code
Finnish timber buildings
Finnish timber buildings

Riihikartano apartment building / Office for Peripheral Architecture Oy (2017–)
Finnish forestry industry

DARK MATTER AND TROJAN HORSES
A STRATEGIC DESIGN VOCABULARY
Strategic design
Make the context
Designing for using and making the city includes creating the conditions for using and making the city.
Strategic design
Mission-oriented innovation
Shifting the emphasis to place-based innovation, addressing climate resilience, public health, and social justice.
Mission-oriented innovation, Mariana Mazzucato, UCL

Vinnova is prototyping mission-oriented innovation for Sweden, looking at two areas initially: healthy sustainable mobility and healthy sustainable food.

This economist has a plan to fix capitalism. It's time we all listened

Mariana Mazzucato has demonstrated that the real driver of innovation isn't lone geniuses but state investment. Now she's working with the UK government, EU and UN to apply her moonshot approach to the world's biggest challenges.
LE PARIS DU 1/4 HEURE

Bien manger

Apprendre

Travailler

Partager et réemployer

Se dénérer

Circuler

Se soigner

S’approprier, s’engager

S’aérer

Un carrefour transformé en place de quartier

Un espace de convivialité pour le quartier

Des jeux pour les enfants

Un potager partagé

De la fraîcheur et des énergies renouvelables

1. Une cour de récréation transformée en jardin ouvert le week-end
2. Une rue pour enfants piétonnière au moins aux heures de dépasse de l’enfant, et où l’on peut jouer avec la balo à jou
3. De nouveaux apprentissages pour les enfants autour de la culture, l’environnement, le bricolage, etc.
4. Des repas biocircuits courts servis aux élèves dans les cantines
5. Une école avec une garantie environnementale : air, soleil, perturbateurs endocriniens
Oslo just decided to get rid of its parking spaces

Oslo hopes to extend pedestrian networks as it eases cars out of the city centre. Image: REUTERS/Ints Kalnins
1–Street.

Ensure that every street in Sweden is healthy, sustainable and vibrant by 2030.
Decreased maintenance costs-
Decreased flooding-
Increased soil quality+
Increased water quality+
Local property value+
Increased retail spend+
Increased social interaction+
Increased mental health+
Decreased respiratory illnesses-
Decreased brain cancer-
Decreased diabetes-
Decreased social care costs-
Decreased healthcare costs-
Increased avian biodiversity+

Decreased heat island effect-
Increased safety+
Decreased CO₂-
Decreased NOₓ-
Decreased property crime-
Increased insect biodiversity+
Reduced embodied CO₂-
Increased cultural production+
Increased local food production+
Increased democratic participation+
Decreased accidents-
Increased public transport performance+
Increased housing affordability+
Increased child sociability+
Increase in overall economic performance including property value and occupancy levels.

Increase in retail and office rental value and occupancy levels.

Reduction in car use and decrease in brain cancer.

Increase in mental health due to reduced air pollution.

Increase in children’s social mobility in walkable neighbourhood.

Increase in children’s play and sociability in play streets.

Increase in storm water mitigation.

Increase in biodiversity.

Increase in biodiversity.

Increase in active transport and decrease in health costs.

Increase in active transport and decrease in health costs.

Increase in sense of community via greenery.

Increase in storm water mitigation.

Increase in physical health via reduced air pollution.

Increase in physical health via reduced air pollution.

Decrease in urban heat island effect.

Decrease in maintenance costs through water sensitive urban design.

Decrease in maintenance costs through shared management.

Decrease in domestic violence due to nearby natural landscapes.

Decrease in maintenance costs through shared management.

Increase in retail spend via increasing active transport and walkability.

Increase in retail spend via increasing active transport and walkability.
Complex objects
Silo-led delivery
Planning

Healthcare

Environment

Social affairs

Police

Culture

Industry

Street

Complex objects

System in the room

Culture+

Democracy+

Biodiversity+

Environment+

Waste-

Water-

Public health+

Healthcare costs-

Social fabric+

Crime-

Energy costs-

Carbon-

Jobs+

Business+
Mission platform strategy

Skills and organisational cultures
Standards and guidelines
Data and code
Financing
Policy
Law

Tangible demonstrators

Shared systemic change layers
Mission platform strategy

Skills and organisational cultures
Standards and guidelines
Data and code
Financing
Policy
Law

Tangible demonstrators
Billions of apps
Developer community
Standards and UI guidelines
Developer software stack
Licensing and business model
Core operating system
Hardware and physics
Design workshop
System in the room

Micromobility startup
Car-sharing company
Energy company
Environment department, municipality
National design agency
National food agency
Chef
High school student
Food retailer and farm
Regulatory authority
Prototyping systems as a portfolio

Workshop sketches
The prototype builds a ‘value model’ and planning tool which defines and steers the mission outcomes. Participants include municipalities, regional governments, and national agencies, as well as street-level intervention. The prototypes deploy into the street, which is a lever across Sweden, and the transport regulator is on-board. User research about impact is commissioned, and in-street real-time sensors will be enabled by the prototype. The value model will cover financing, and delivering the prototype will develop policy and regulatory insights. Building the prototypes with municipalities and regions sheds light on multiple capability gaps. Ethnographic and user research is deployed into micro-mobility and impact of COVID-19 onto street behaviours. Rudimentary action-oriented stakeholder and systems maps are developed in Kumu, within wider mission. The prototypes are intrinsically citizen-facing, including participative design with schoolchildren.
The idea is to build elements that can spread across all streets, piece by piece, by working with local communities and municipalities, until the street is ready for fuller transformation.
Participative design
Framtidsgator
Design workshop
System in the room
Prototyping systems as a portfolio

Participation
Participative design

Levandegator
Whilst Framtidsgator indicates how an entire street can be retrofitted, Levandegator’s first prototype, Urbanabryggor (Urban Boardwalk), proposes a half-step, creating an adaptable ‘kit-of-parts’ that can be deployed into existing parking spaces or other street space. The Boardwalk is designed to be moved and installed quickly, yet be highly durable, and equally, after the street is slowed, greened, and re-oriented around people, place, and environment, the kit’s job may be done, enabling a more bespoke retrofit.

Capable of doing multiple things, the intention is that the kit will be co-designed with residents and users of the streets. Using open source framework principles, applications can be created by people, and shared across the system. The street decides what kit is deployed: some streets may want a garden, outdoor gym and playground; others may want cafés, stalls, meeting spaces; all are likely to want some form of personal and shared mobility support, such as bike stands, e-bike charging units, scooter racks, car-sharing points, and logistics drop-off points/e-commerce lockers. As these prototypes develop, there will be increased emphasis on ‘green and blue infrastructure’, like vegetation, bioswales, and urban agriculture.

Whilst the decision-making is coordinated by the street itself, adapting building management practices, the municipality helps coordinate. It also owns the elements, in terms of capital cost. Maintenance can be shared across street and municipality. Local timber manufacturing is used for construction, enabling sustainability, customisation, adaptation, and patina.
Prototyping systems as a portfolio

Urban boardwalk prototype
The project uses a strategic approach to collaboration, regulation, policy-making and delivery, ensuring it can scale.

<table>
<thead>
<tr>
<th>Place layers</th>
<th>In the Street mission</th>
<th>Place-based collaborators</th>
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<tbody>
<tr>
<td>Physical and digital experiences</td>
<td>Physical, digital, and social interventions in streets in Stockholm, Helsingborg, and Umeå, within a wider network of nine municipalities coordinated by Viable Cities.</td>
<td>Stockholms stad Trafikkontoret and Miljö departments; Helsingborg stad; Umeå stad; Stockholm Region planning and health departments; Voi; Volvo M; Lundberg Design; Spacescape</td>
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<tr>
<td>System layers</td>
<td>In the Street mission</td>
<td>System collaborators</td>
</tr>
<tr>
<td>Skills and organisational cultures</td>
<td>Urban design/architecture; IoT, data science; user experience; micromobility, transport, and logistics; place-based governance; participative democracy; microeconomics; health and wellbeing; landscape design and biodiversity</td>
<td>ArkDes; Rådet för hållbara städer; Boverket; Voi; Volvo M; Lundberg Design; Spacescape</td>
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<tr>
<td>Standards and guidelines</td>
<td>Interoperable mobility standards, street furniture design guidelines, health and safety guidelines for micromobility, civic IoT privacy guidelines, street design guidelines and best practice</td>
<td>Municipal traffic departments in Stockholm, Helsingborg and Umeå; Stockholm Region; Trafikverket; Voi; Volvo M; Lundberg Design; Spacescape; RISE</td>
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<tr>
<td>Data and code</td>
<td>Micromobility data standards; Real-time kerbside management systems; ‘digital twins’; Internet of Things kits; environmental sensor data standards; footfall measurement standards</td>
<td>Stockholms stad; Helsingborg stad; Umeå stad; Stockholm Region; SKR; Voi; Volvo M; Ericsson R&amp;D; Vinnova; RISE</td>
</tr>
<tr>
<td>Financing</td>
<td>New value models, with ‘total value budgeting’ based on public health and wellbeing savings, environmental benefits, maintenance benefits; place-based system demonstrator innovation funding</td>
<td>Vinnova; Stockholm Region; Climate-KIC</td>
</tr>
<tr>
<td>Policy</td>
<td>Parking space policy; street planning policy; local real estate policy; participative design and planning policy; smart city policy; arts and culture policy; licensing policies</td>
<td>ArkDes; Rådet för hållbara städer; Boverket; Climate-KIC; Viable Cities; Vinnova; RISE; Stockholm Region</td>
</tr>
<tr>
<td>Law</td>
<td>Parking space law, traffic speed limits, vehicle definitions, municipal and regional governance and financing law</td>
<td>Transportstyrelsen (national regulatory authority)</td>
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Who decides?
The street, conceived in this way, more than a space in which to represent ritualised routines, is a place in which new forms of the social and the political can appear.

Saskia Sassen
BLACK LIVES MATTER
It’s one thing to take a space. It’s another thing to turn a space into something functional that actually serves the community.

Activist and mayoral candidate Nikkita Oliver, Seattle
Between the roots and the stars
Between the roots and the stars

- Walking
- Biodiversity
- Commerce
- Culture
- Vehicles

Corona
'Slowdown',
Danny Dorling
(2020)
The slowdown curve also points to the first that is not due to famine, plague, war, or conquest.

When both axes of the timeline are shown on a log scale, the various slowdowns that have occurred in different times become far more apparent. Estimates of global human population from before 1850 are especially unreliable.

The reliability of estimation techniques will become more obvious as new data are released.

By 2050, there were just over 7 billion people living in what was then a British colony. 30% of the world total. By 2013, there were just over 10 billion people, now 17%. By the year 2000, the proportion of the world’s population was back up to just under 1 billion levels at 1.3 billion.

1840-1850: 1 billion
1930: 4 billion
1959: 5 billion
1974: 6 billion
1994: 7 billion
2050: 9 billion

The atomic bombing of Hiroshima and Nagasaki in 1945.

Population grew rapidly following the end of World War II, peaking in 1948.

End of the Russo-Japanese War 1903.

1918/19: Influenza pandemic of 1918.
1919: Influenza pandemic.
Population projections investigate how the Canadian population might evolve in the years ahead. Statistics Canada publishes several scenarios to highlight the uncertain nature of population projections, making it clear that the future is not yet defined.

Readers can now access the publications Population Projections for Canada (2018 to 2068), Provinces and Territories (2018 to 2043), Population Projections for Canada (2018 to 2068), Provinces and Territories (2018 to 2043): Technical Report on Methodology and Assumptions, as well as the new infographic "What will the population of Canada look like in 2068?"

55 million Canadians by 2068?

While the populations of many developed countries are expected to decrease, Canada's population is projected to grow over the next 50 years, largely because of strong immigration.

Population growth, however, is likely to vary across the country, with the population of some provinces and territories increasing and others decreasing. As a result, the provinces and territories may experience diverse opportunities and challenges over the coming decades.

The Canadian population has grown substantially in recent years, increasing from 30.7 million people in 2000 to 37.1 million in 2018.

The projections show that growth would continue in Canada over the next 50 years, and that the population could reach between 44.4 million and 70.2 million inhabitants by 2068. In the medium-growth scenario, the Canadian population would grow from 37.1 million inhabitants in 2018 to 55.2 million by 2068.

According to the low- and medium-growth scenarios, the rate of population growth would slow in the coming years, owing mainly to an increasing number of deaths relative to births. The expected increase in the number of deaths is mainly related to population aging.

In all scenarios, immigration would remain the key driver of population growth over the next 50 years, as has been the case since the early 1990s.

Increasing share of people aged 65 and older, decreasing share of the working-age population

According to all scenarios, Canada's population would continue to become older in the coming years at both the national and the provincial and territorial levels.
World population in 2100 could be 2 billion below UN forecasts, study suggests

Changes in population structure due to improving equality and ageing societies will pose policy dilemmas

Global population growth may peak sooner than expected if the lot of women continues to improve, according to a study that says the world’s population could be 2 billion below UN forecasts by the end of the century.

Such a fall would remove some of the projected strain on natural resources but would present governments with stark policy choices over migration and the economy.

The world’s population will peak at 9.7 billion in 2064 and decline to 8.8 billion by the end of the century, according to research led by the University of Oxford and University of New South Wales. It means that the current 7.7 billion will be replaced by the same number in 2100, a situation that may pose significant challenges for policymakers in the world’s developed and developing economies.
Tokyo is small and slow.
The 1-minute City

The street

Massive re-emphasis on regenerative landscape, on conviviality and culture, on shared ownership, on true participation, on adaptation and repair.
The Slowdown
A glimpse of a future
A transition centred on climate resilience, human and non-human health, and social justice.
These are all the same thing.
The failure—or at least the postponement—of the grand is also the survival of the ordinary and the everyday; the survival of citizens over cities; of infrastructures of everyday dignity over big, signature, spectacular projects; of incremental change over instantaneous transformation; of the bazaar over the mall, the shared auto over the expressway, survival over smartness.

Gautam Bhan, India Times, 2017
From making the city to using the city. Designing infrastructures of everyday dignity, of everyday complexity.

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