



**AESOP4FOOD**

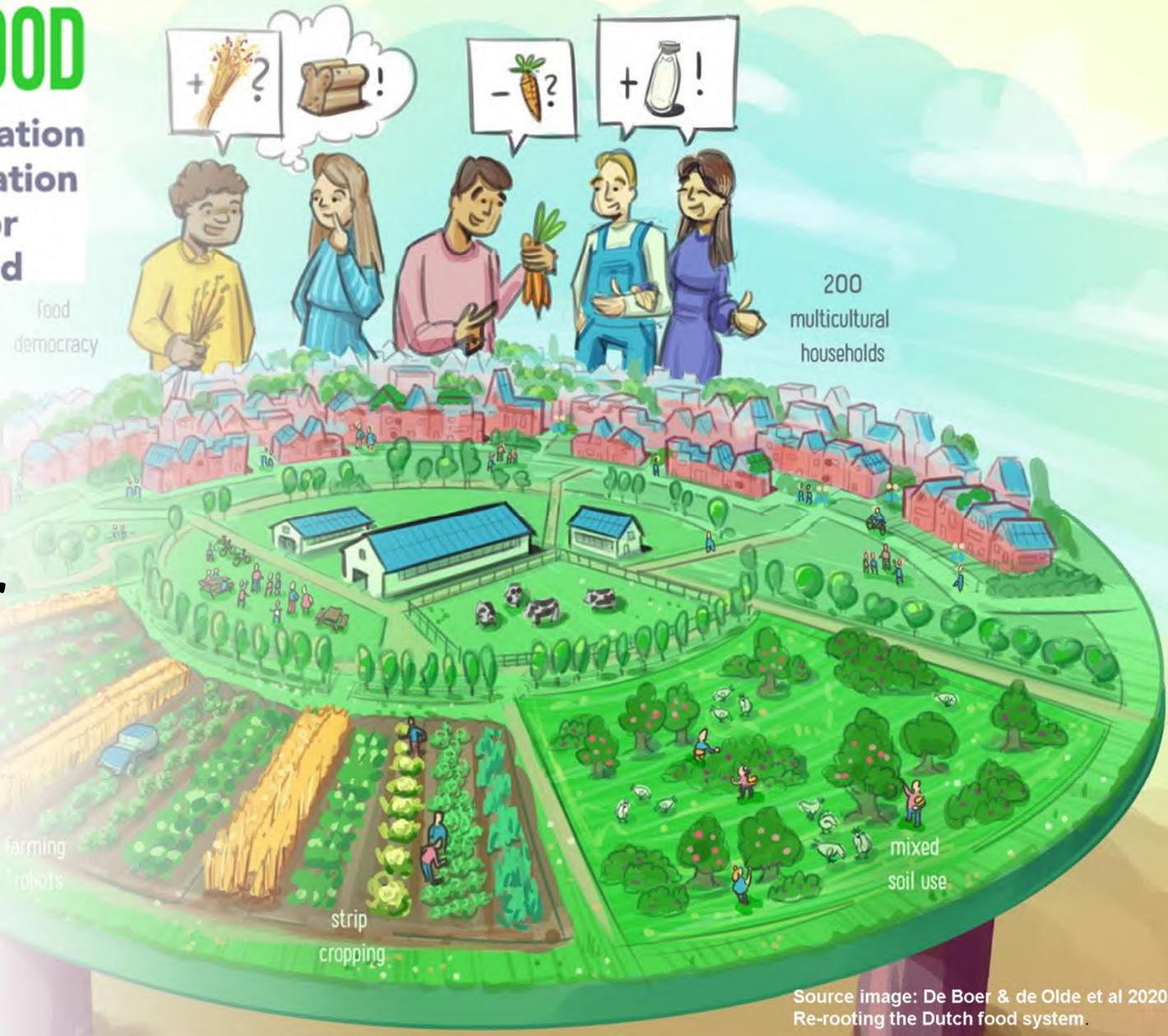
Action for Education  
Spatial Organisation  
and Planning For  
Sustainable Food

**AESOP4Food**  
***Sustainable Food  
Planning Seminar***

***Third session***

PHASE I / 2023

***March 16, 2023***



Source image: De Boer & de Olde et al 2020  
Re-rooting the Dutch food system.

# AESOP4food Online Seminar 2023

## COURSE SCHEDULE

March 2<sup>nd</sup> – June 1st, 2023

Thursday / 17:00 to 18:30 CET



*Mainly for students from partners Universities*

## INTENSIVE WORKSHOP

GHENT 9 – 18 July, 2023

# Agenda March 16, 2023

- *Introduction*
- *Short recap: **Field of play of sustainable food planning***
- *INTERACTIVE: poll*
- *Invited lecturer: **Joe Nasr & Matt Potteiger: Spaces, systems and infrastructures: From theories to strategies for the productive urban landscape***
- *Q&A session*
- *INTERACTIVE: breakout rooms*
- *Next session + compulsory reading*

# Recap of the two first sessions

- *Field of play, sustainable food challenges*
- *Introduction on the main concepts –*
  - *Food systems*
  - *City-region approach*
  - *Agroecology*
  - *Food democracy and justice*

# Agroecology

Application of ecological principles to the study, design and management of agroecosystems that are

- both productive and natural resource conserving
- culturally sensitive
- socially just
- economically viable

*Altieri and Toledo 2011; Gliessman 2012; Fernandez et al. 2013.*

# Damien Conaré presented the limits of an industrialized food system

## Health

- . 850 million undernourished – 1.5 billion overweight – 300 million diabetes type 2
- . “nutrition transition”: shift to processed foods (richer in salt, sugar and saturated fats) often less nutritious

## Socio-economic

- . maximize efficiency gains vs. distributional concerns
- . regional hyper-specialization
- . creation of giant agri-food corporations
- . precarious working conditions

## Environment

- . soil degradation
- . water shortages
- . biodiversity loss
- . waste and losses
- . pollutions, GHG emissions



# City Region Food Systems

A food system is the complex set of activities and relationships in the food cycle: growing, producing, processing, distributing, marketing, retailing, storing, preparing, consuming and disposing' (City of Hamilton 2014).

An ideal CRFS fosters four interconnected elements throughout the food chain:

1. food security and nutrition;
2. livelihoods and economic development;
3. sustainable natural resources management;
4. social inclusion and equity (FAO and RUAF 2015).

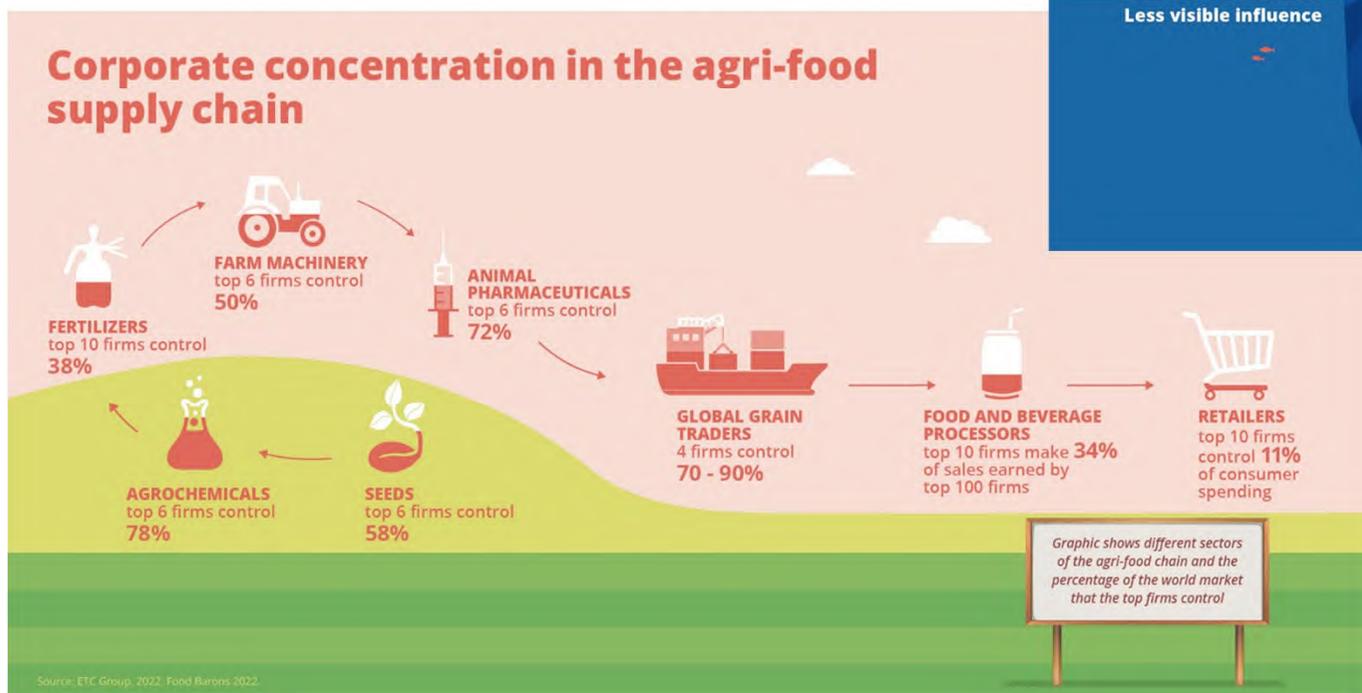
Better connections among cities and towns and between them and their rural surroundings

# Damien Conaré; a multiform distancing

<b>political</b>	loss of control by citizens over their food system asymmetry with more powerful actors
<b>economic</b>	multiplication of intermediaries between farmers and consumers to circulate, process, store and distribute food
<b>geographical</b>	distancing from production areas urban sprawl + low shipping costs
<b>cognitive</b>	loss of contact between city dwellers and farmers, and lack of knowledge about the world of agriculture and food generates 'eater anxiety'

# Nicole Pita IPES-food

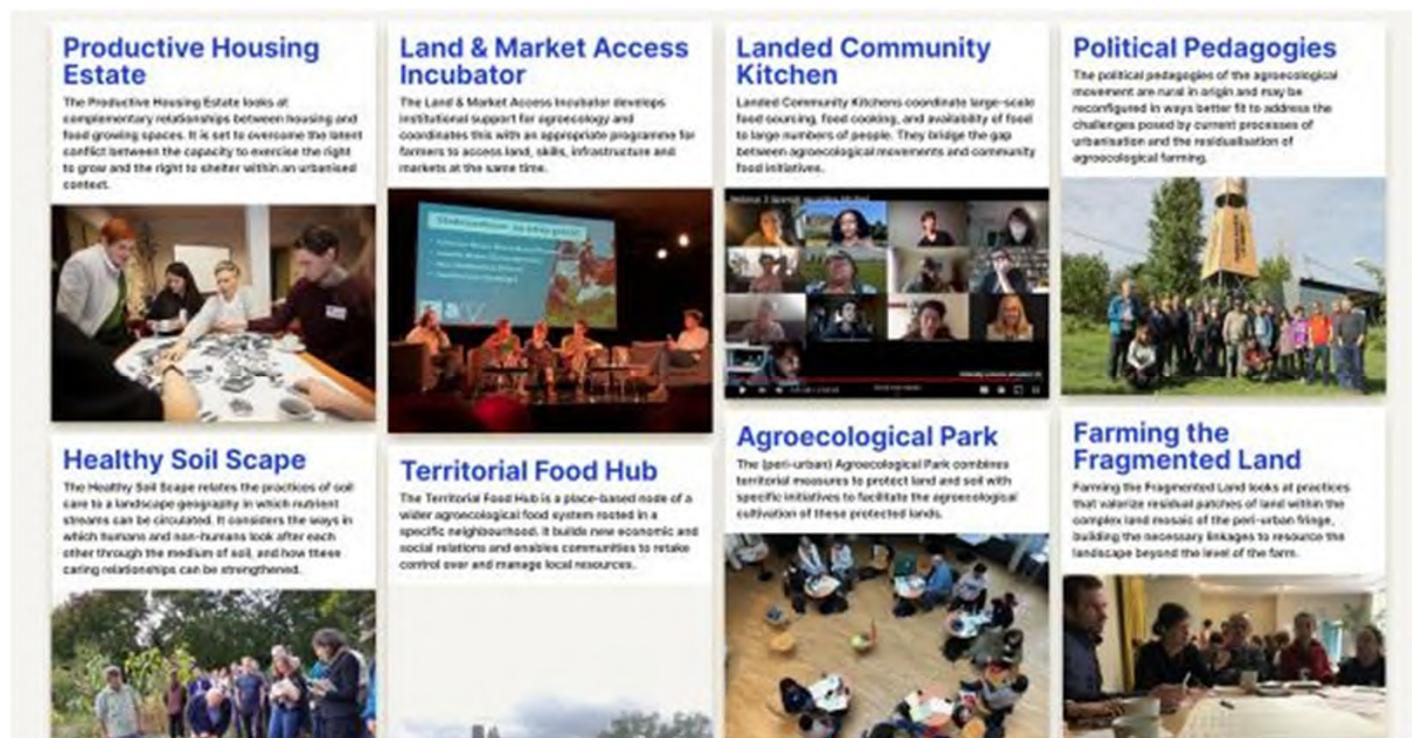
## Corporate influence on the global governance



# Building blocks of an Agroecological Urbanism

Michiel Dehaene

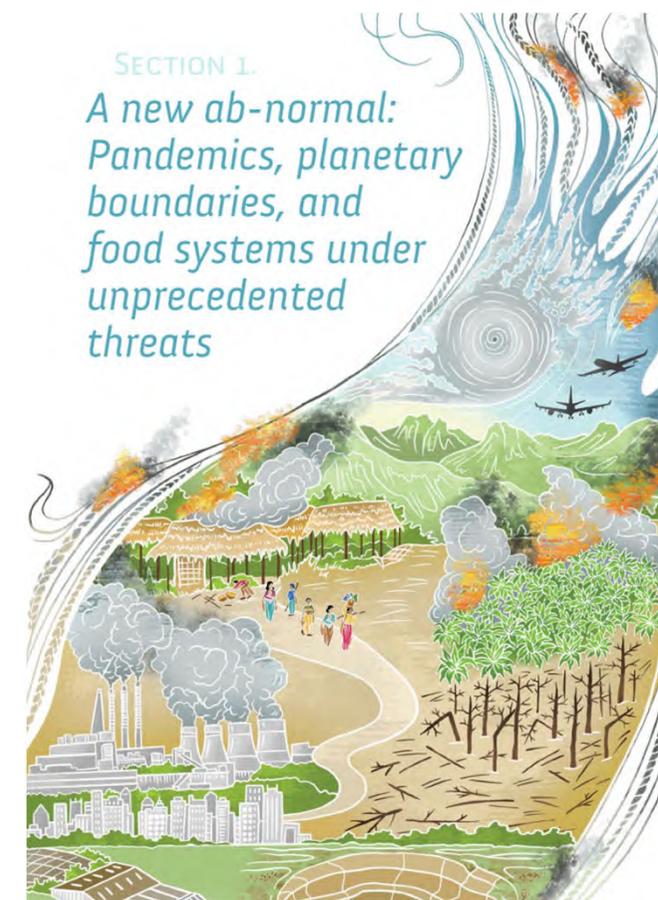
the development,  
approaches and  
components of an  
agroecological  
urbanism



# Poll on Long Food Movement

What do you think is the main motivation of IPES for publishing the LFM.

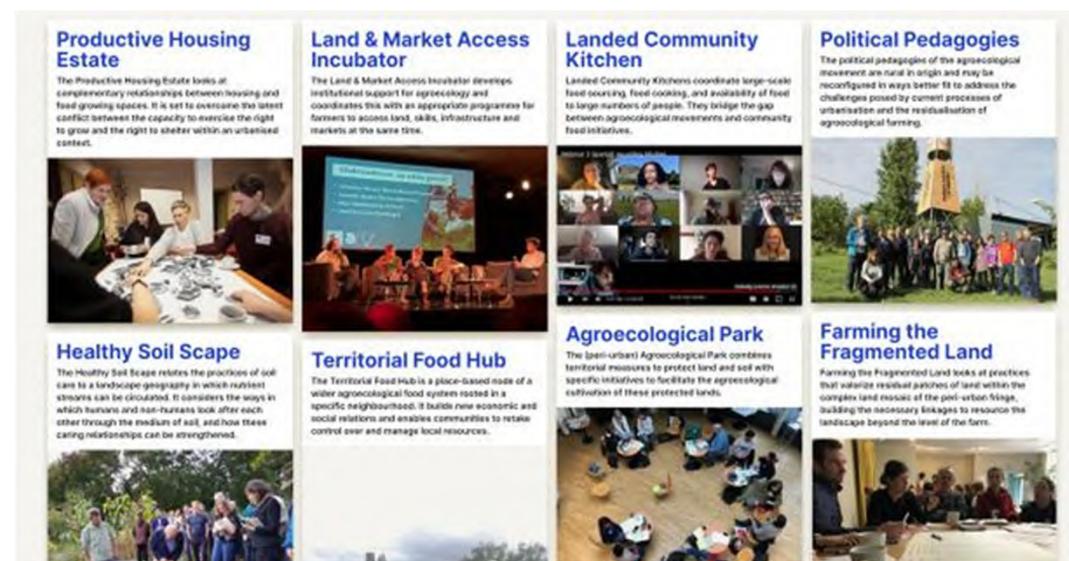
- The EU does not seem capable of implementing such a policy because **countries do not agree**
- There is a strong **lobby of agribusiness** and existing policies only to **stay within the sectoral domains.**
- They see that transformations will only be successful by fostering **collaboration across multiple scales** and **strengthening civic engagement.**
- There is a need for **technical solutions** in the food chain, such as smart agriculture, precision agriculture, so we should not wait for policies.



# What would be your preferred building block to use as an approach?

Michiel Dehaene presented eight building blocks that are approaches for an Agroecological Urbanism.

- Productive Housing Estate
- Land & Market Access Incubator
- Landed Community Kitchen
- Political Pedagogies
- Farming the Fragmented Land
- Territorial Food Hub
- Healthy Soil Scape
- Agroecological Park



# Spaces, systems and infrastructures

## *From theories to strategies for the productive urban landscape*

## Invited lecturers



**Joe Nasr**

Joe Nasr is an independent scholar, lecturer and consultant based in Toronto.

He has been exploring *urban agriculture* and *food security* issues for three decades. Joe taught or held fellowships at a number of universities in several countries; he is a **lecturer and member** of the **Centre for Studies in Food Security** at Toronto Metropolitan University.

He co-wrote or co-edited five books and dozens of articles and co-edits the Springer Urban Agriculture Book Series.

# Matthew Potteiger

Matthew Potteiger is a **Professor of Landscape Architecture** at the **State University of New York, Syracuse**, where his teaching, research and community projects focus on linking food systems with the design of landscape systems. He has studied food systems of Japan, Brazil and North American cities.

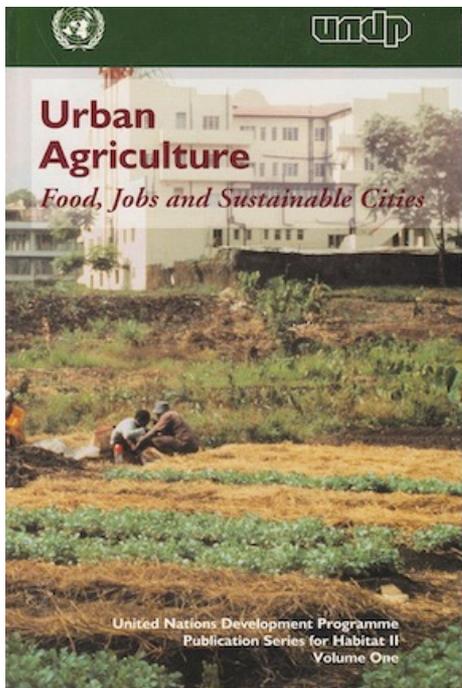
For 10 years he taught a **food systems design studio** and has lead *numerous community-based food system projects* to for urban agriculture, public markets, and regional foodshed planning in New York State.





Spaces, systems, and infrastructures:  
from theories to strategies for the productive urban landscape

Joe Nasr and Matthew Potteiger



**CARROT CITY**  
 CREATING PLACES FOR URBAN AGRICULTURE  
 Mark Gorgolewski, June Komisar, and Joe Nasr



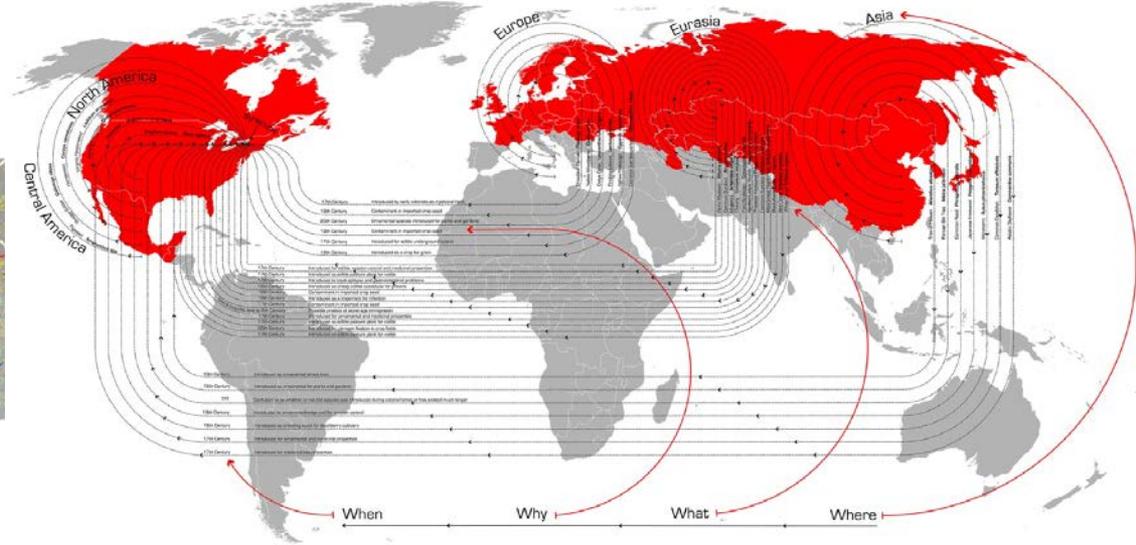
# Joe Nasr



# Matthew Potteiger

## THE SPONTANEOUS EDIBLE ANTHROPOCENE:

TRANSPORTATION OF SPONTANEOUS EDIBLE PLANT SPECIES FROM AROUND THE WORLD [ WHY | WHAT | WHEN | WHERE ]







# Introduction



## I. Foundational visions of productive urban landscapes



## II. Contemporary conceptions of productive urban landscapes



## III. A framework of approaches



## Concluding thoughts

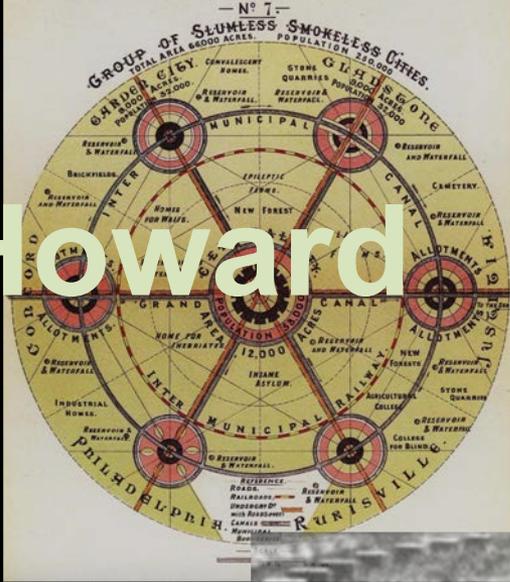


## **II. Foundational visions of productive urban landscapes**

- **Reconfiguring the urban/rural dichotomy**
- **Scale and density of the productive city**
- **Controlling spaces vs systemic change**
- **Social organization, agency, and justice**

# Foundational visions

Howard

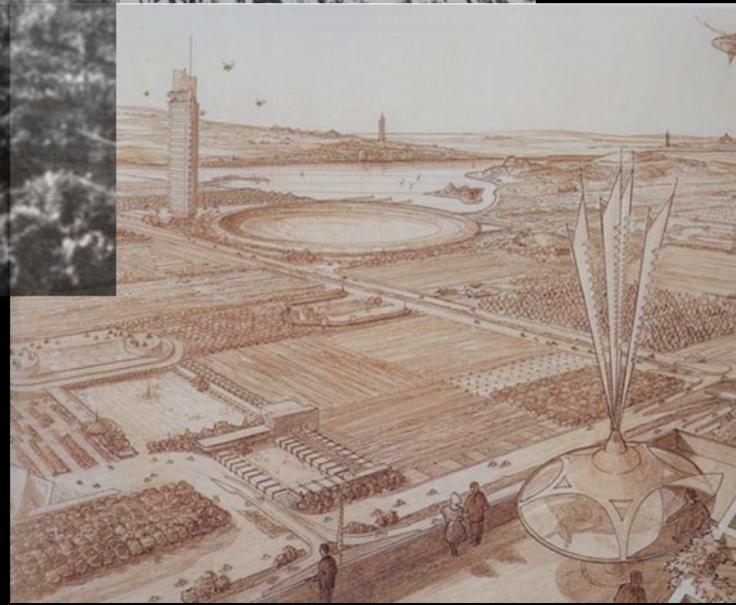


Hilberseimer

Migge



Wright



# agricultural/industrial revolutions



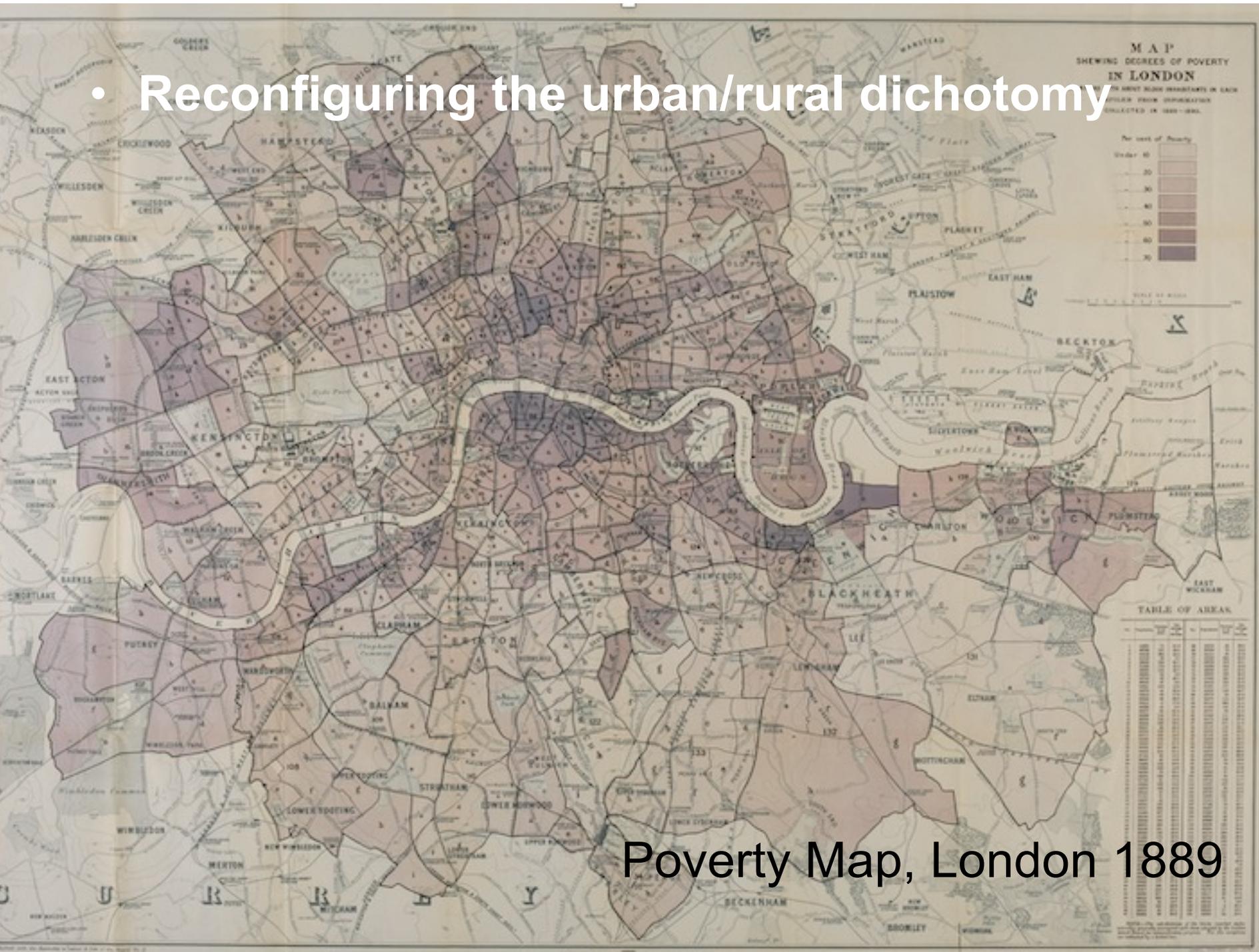
1786

growth of London

1900



- Reconfiguring the urban/rural dichotomy

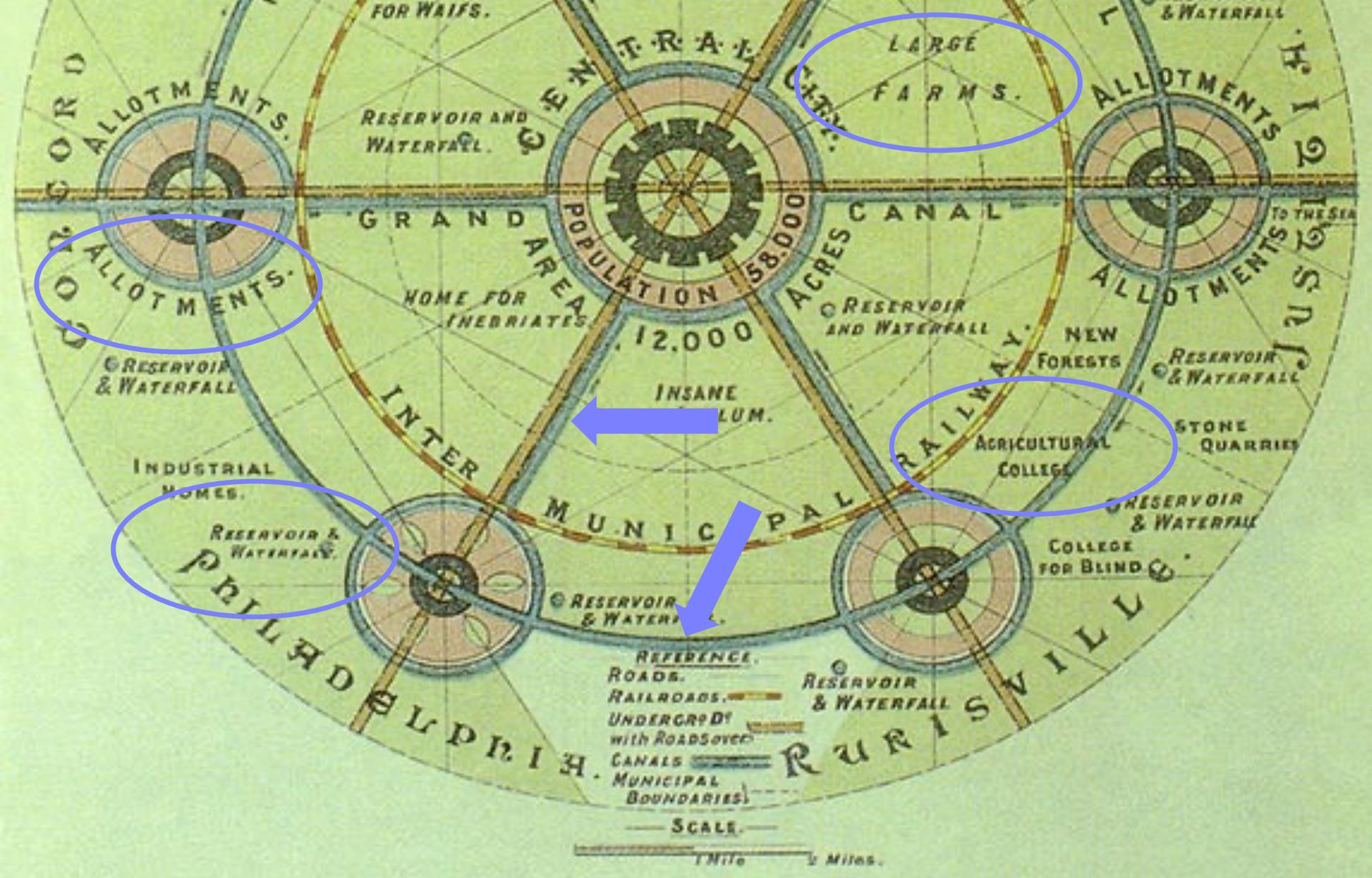


Poverty Map, London 1889



Booth's Poverty Map of London, 1898 showing urban edge of northeastern section

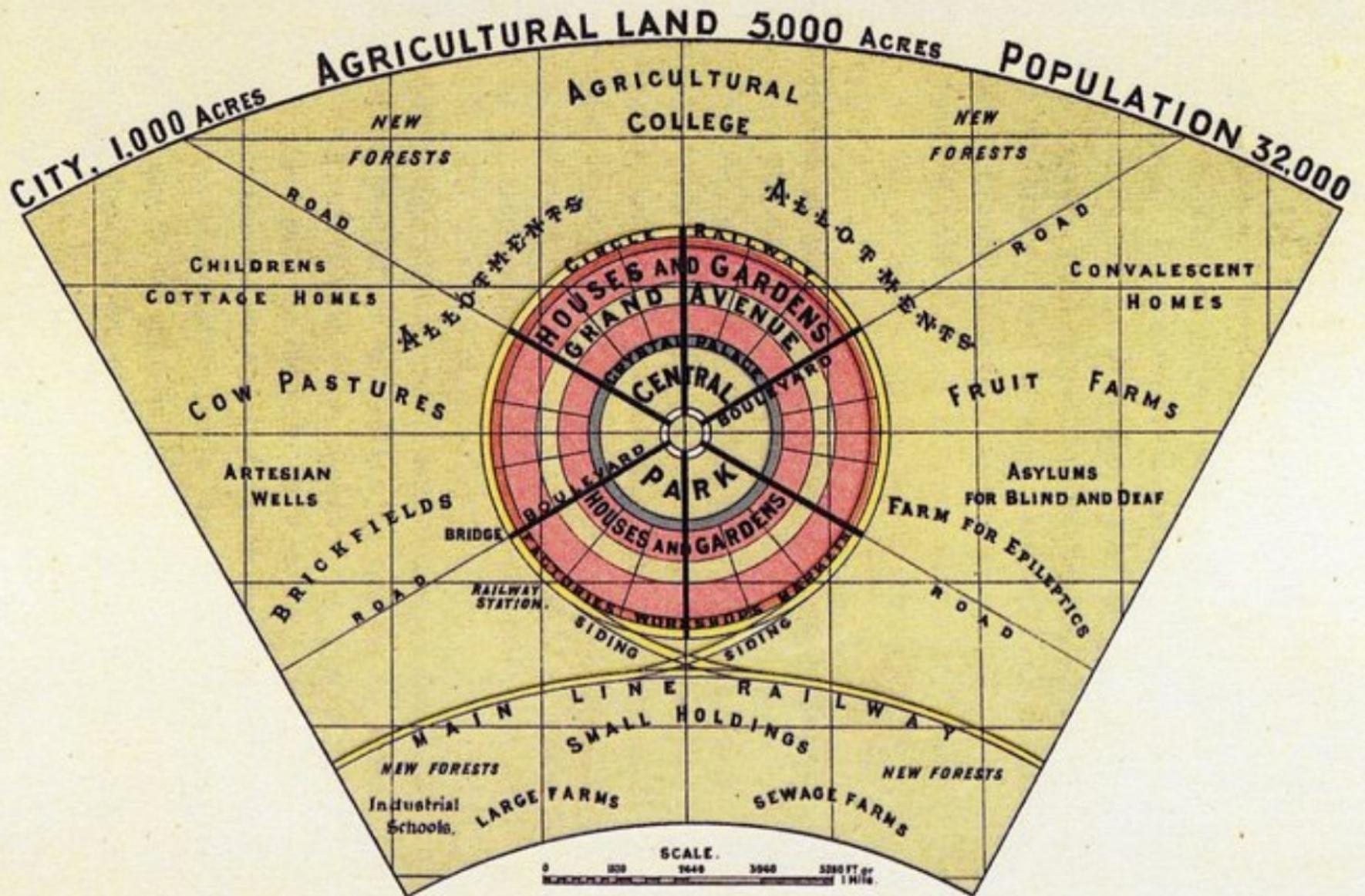




*Garden Cities of Tomorrow* Ebenezer Howard  
1898-1902

— N<sup>o</sup> 2. —

# GARDEN - CITY



## Greenbelt land uses:

Allotments

Small farms

Large farms

Fruit farms

Sewage farms

Cow pastures

Epileptic farms

cemetery

Artesian wells

brickfields

New forests

Reservoir & waterfall

Stone quarries

Children's cottage homes

Agricultural college

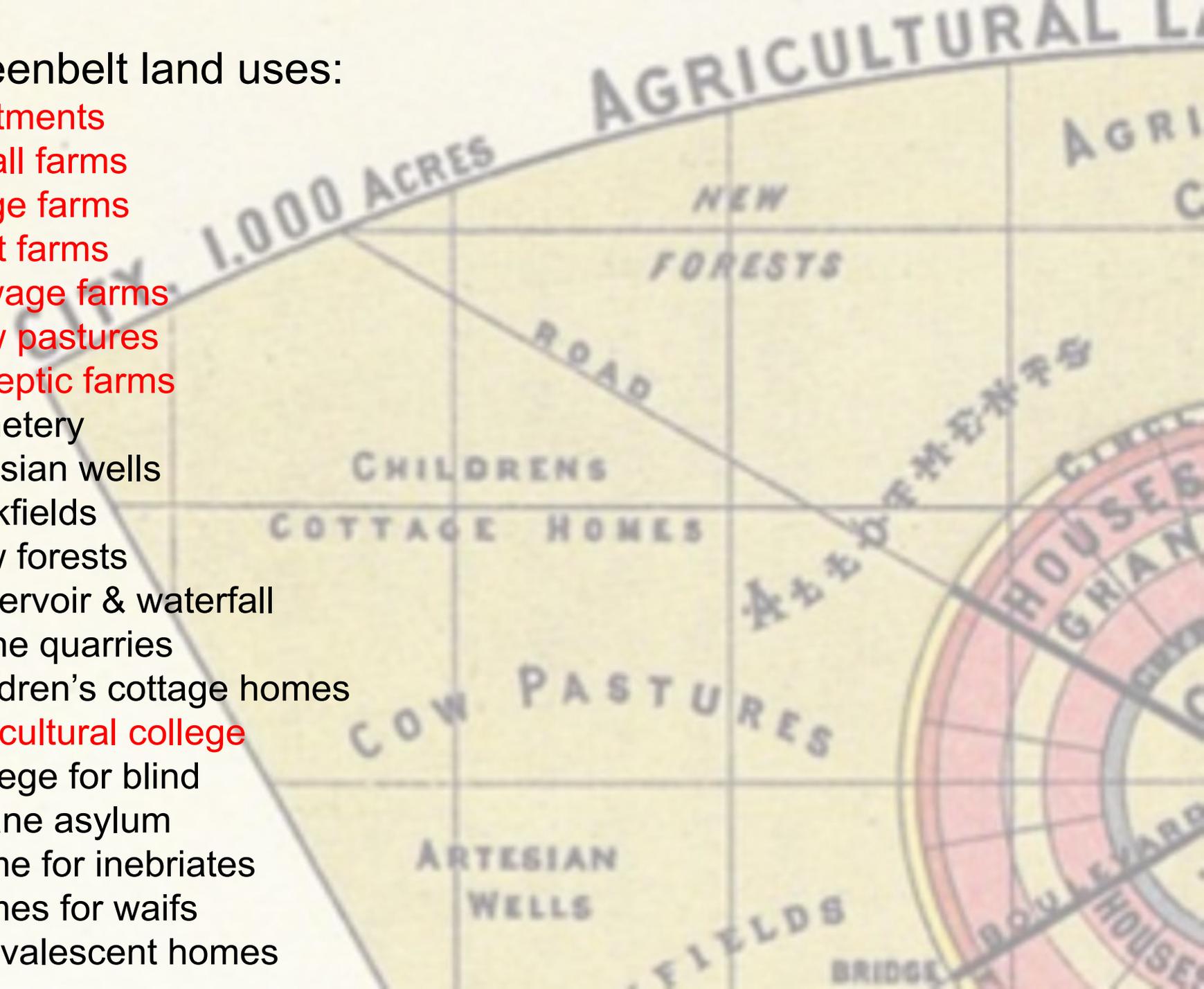
College for blind

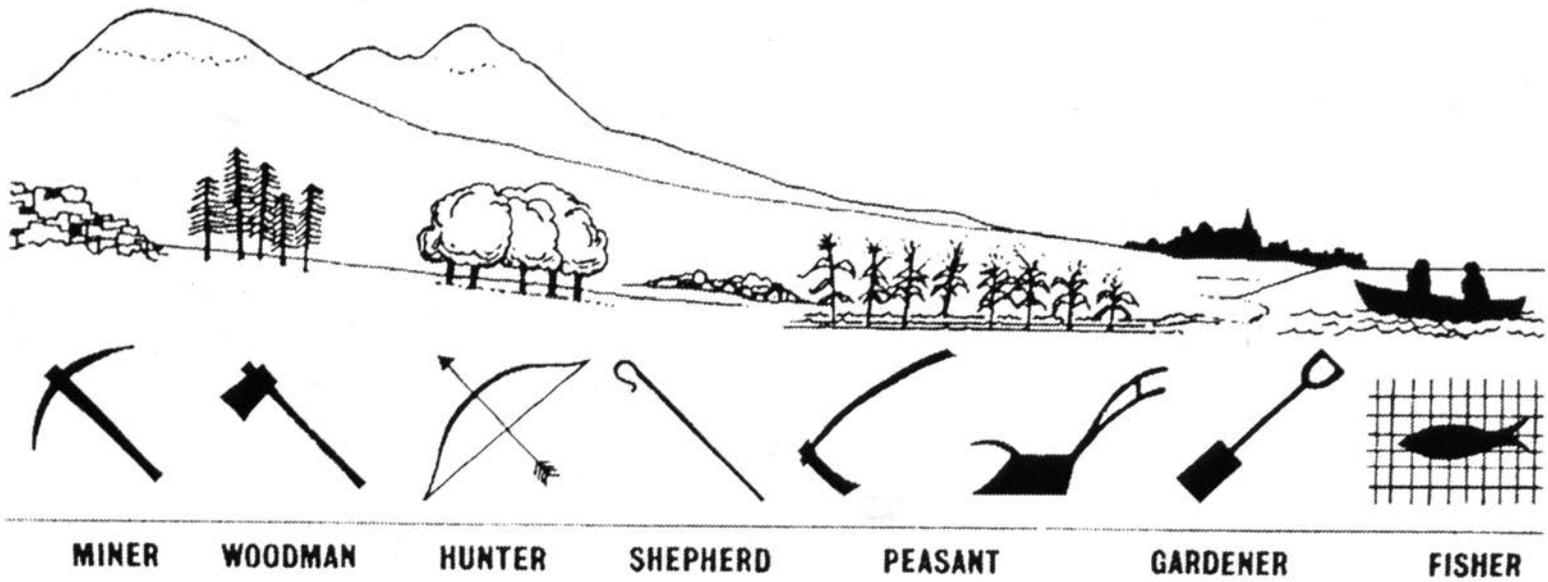
Insane asylum

Home for inebriates

Homes for waifs

Convalescent homes





Geddes: Valley Section

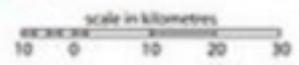


Possibility grows here.



# ONTARIO'S GREENBELT

- Ontario's Greenbelt
- Built-Up Area\*
- Highway
- Major road



Road network from Digital Cartographic Reference Base of Ontario Geomatics Office, Ministry of Transportation, Ontario, 2009. \*Built-Up Area current to 2001 and provided by the Neptis Foundation.

While the Friends of the Greenbelt Foundation has made every effort to depict accurate and current map information, there may be discrepancies or errors in the depiction that are unintended.



## Microclimate control effect of paddy fields in urban areas

Historic Edo, Japan  
40% of city  
As productive land  
- Yokohari

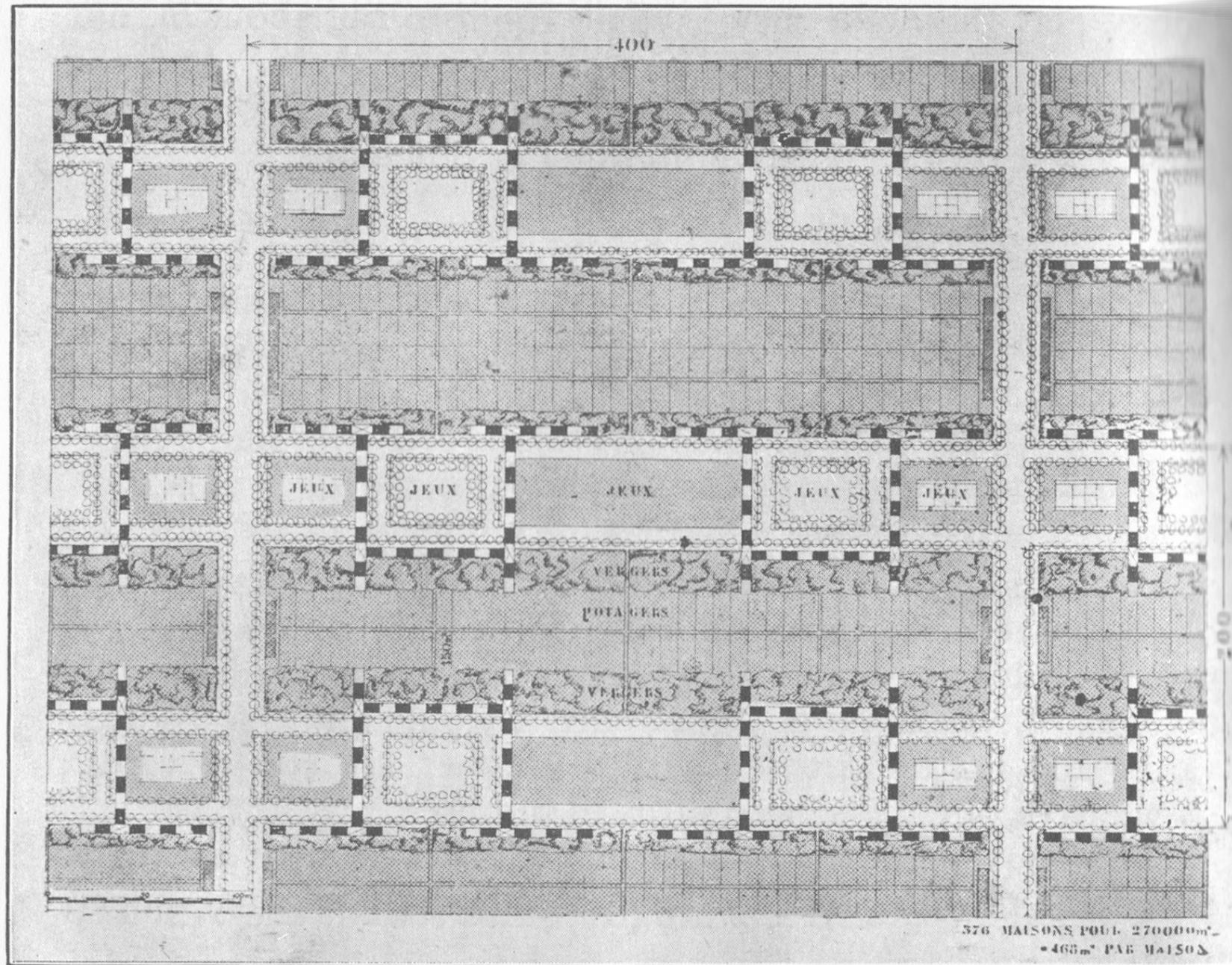


- Scale and density of the productive city



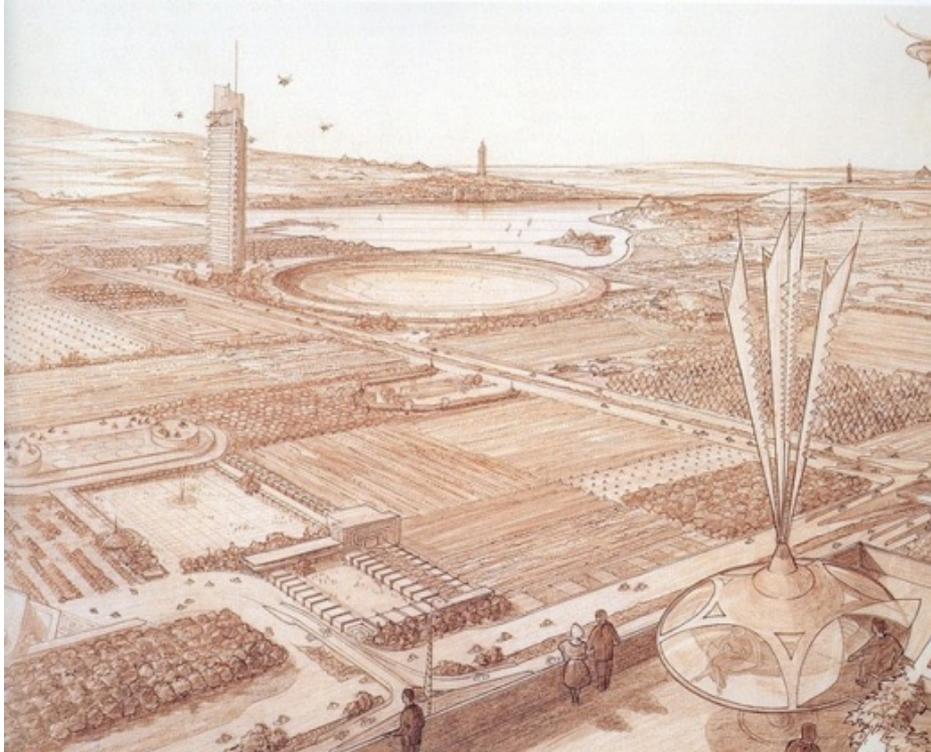
Lebrecht Migge. Kitchen gardens in Römerstadt Siedlung, Frankfurt, 1930

Lebrecht Migge 1881-1935: Gartenkultur des 20. Jahrhunderts, Kassel: Bundesgartenschau, 1981



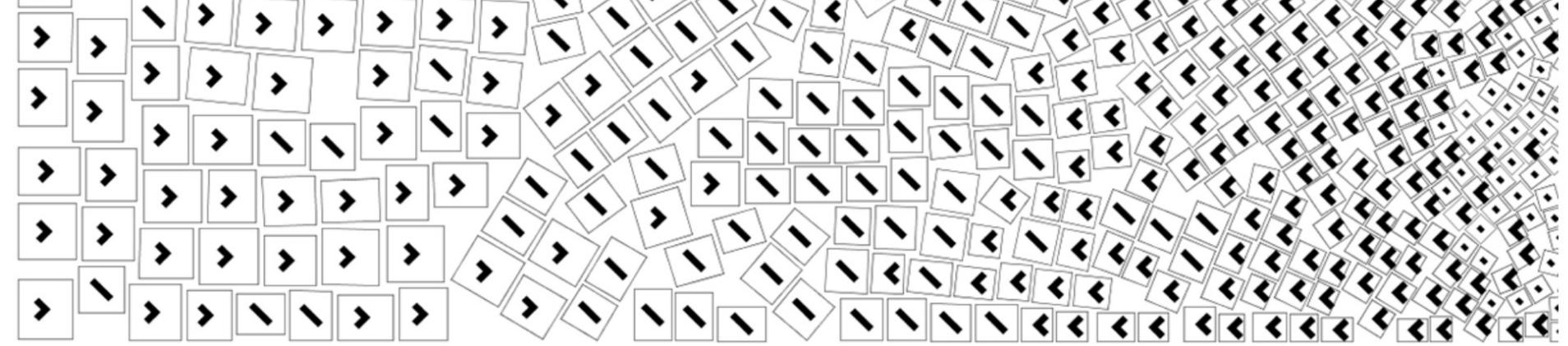
Le Corbusier. Workers house with “potagers” Villa Contemporaine, 1922

From Le Corbusier, *Urbanisme* (Paris: Cres, 1925)

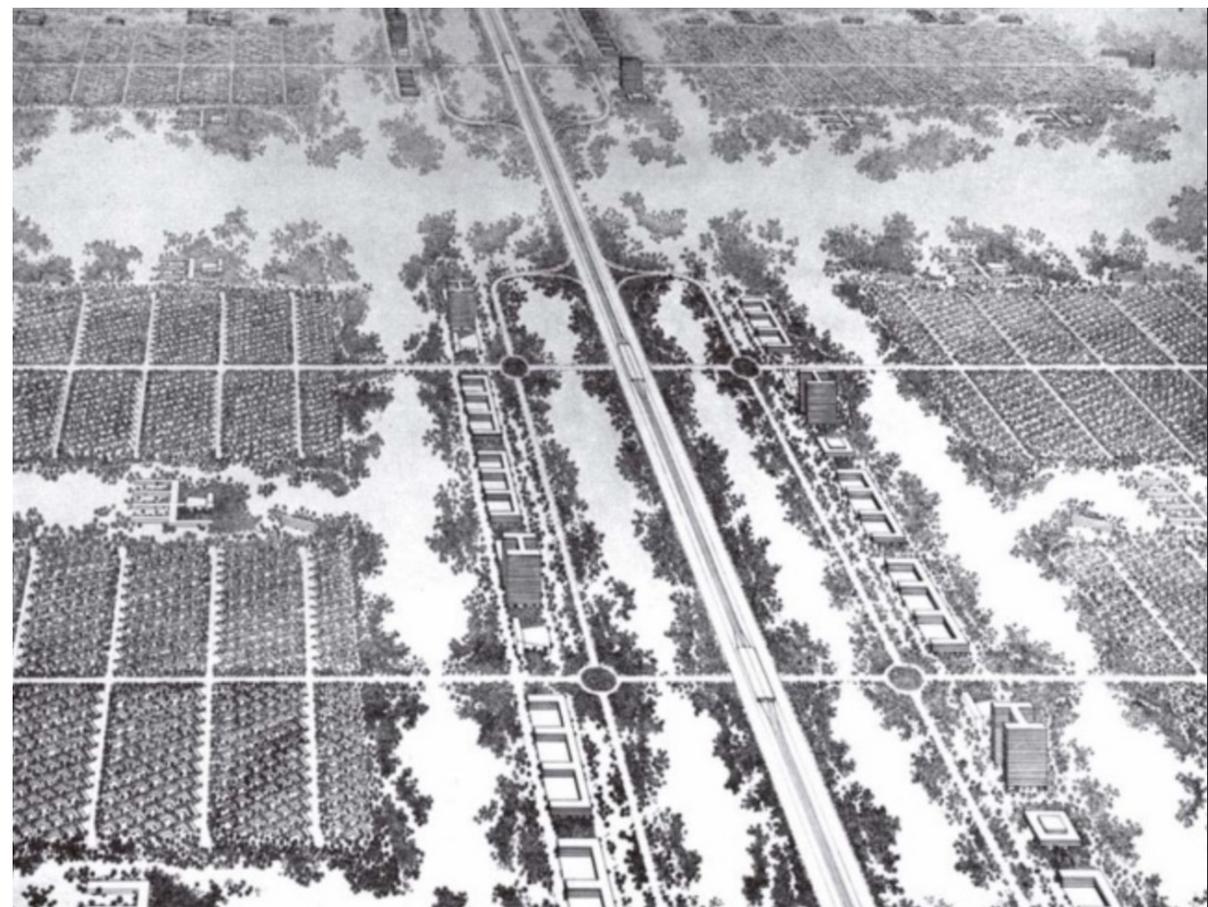


The road will have a wide center  
to allow for a car to pass another car.  
The center - a road of a certain width  
to allow for a car to pass another car.  
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to allow for a car to pass another car.  
The center - a road of a certain width  
to allow for a car to pass another car.

F.L.Wright  
Images of  
Broadacre City



"Effect of different densities on the plan of houses", original diagram by L. Hilberseimer, *The New City*, 1944, p.91



"Birds-eye view of commercial area and settlement unit"  
L. Hilberseimer.  
In *The New City* (1944)

- Controlling spaces vs systemic change



Clinton Square market. Syracuse, NY 1890's -- re-designed, market moved to edge of city

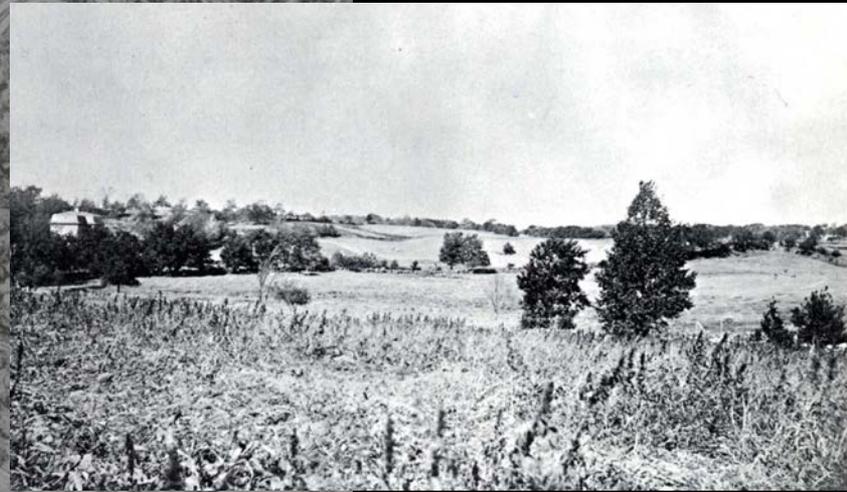
Urban markets and aesthetic ideology of City Beautiful movement

§ 5. *Good Order.*—Idlers and dogs shall not be permitted to remain on said markets. No person shall be guilty of any boisterous or disorderly conduct upon the said markets and no person shall resist or obstruct the custodian thereof or any officer of the market in the discharge of his duties, nor refuse to allow the custodian to examine the character and quality of any article of food offered for sale or to weigh or measure the same.

# Franklin Park, Boston

“...relieved of a few houses, causeways and fences, left with an unbroken surface of turf and secluded by woods on the hillsides, this would at once supply a singularly complete and perfect though limited example of a type of scenery which is perhaps the most soothing in its influence on mankind of any presented by nature.”

-- Olmsted (from Zaitzevsky, Frederick Law Olmsted and the Boston Park System)





## Olmsted's farm, Staten Island

<http://www.nytimes.com/2012/08/05/nyregion/a-lab-a-home-a-memory>

- Social organization, agency, and justice

**Green Guerillas Fact Sheet** 417 LAFAYETTE STREET  
NEW YORK, NEW YORK 10003  
212 6748124

TWO  
SEED GRENADE RECIPES  
OR  
HOW TO HIDE ILLEGAL DUMPING SPACE

Assemble the following ingredients:

A. Old glass Christmas ornaments  
Small funnel  
Pelletized, time-release fertilizer  
Peatmoss "crumbs"  
Tissue  
Seeds - see below

B. Small balloons  
Funnel  
Pelletized, time-release fertilizer  
Peatmoss "crumbs"  
Seeds - see below  
sink faucet

Add seed and fertilizer to grenade membrane:

Add seeds and fertilizer first, followed by moist peatmoss "crumbs". Stuff the opening at the top with a small piece of tissue. Gently shake to mix thoroughly.

Add seeds and fertilizer first, followed by moistened peatmoss "crumbs". Stretch the mouth of the balloon over the faucet mouth and carefully fill with water. Tie off the opening. Gently shake to mix thoroughly.

Instructions for use:

Choose a lot that has a fence and is legally inaccessible. Calculate in advance how many grenades will be needed to cover the area. Check carefully before throwing. Observe all normal safety precautions. Suggested throwing techniques are: for Christmas ornaments - use an underhand throw; for the water balloons - use an overhand throw.

Seed list

for early fall	for early spring	for late spring	for early summer
Soybeans	Batchelor Buttons	Cosmos	Sunflower
Clover	Dianthus	Portulaca	ornamental grass mix
Winter rye	Wildflower mix	Zinnia	Marigolds
Cleome	plain old grass	Nicotiana	Zinnia



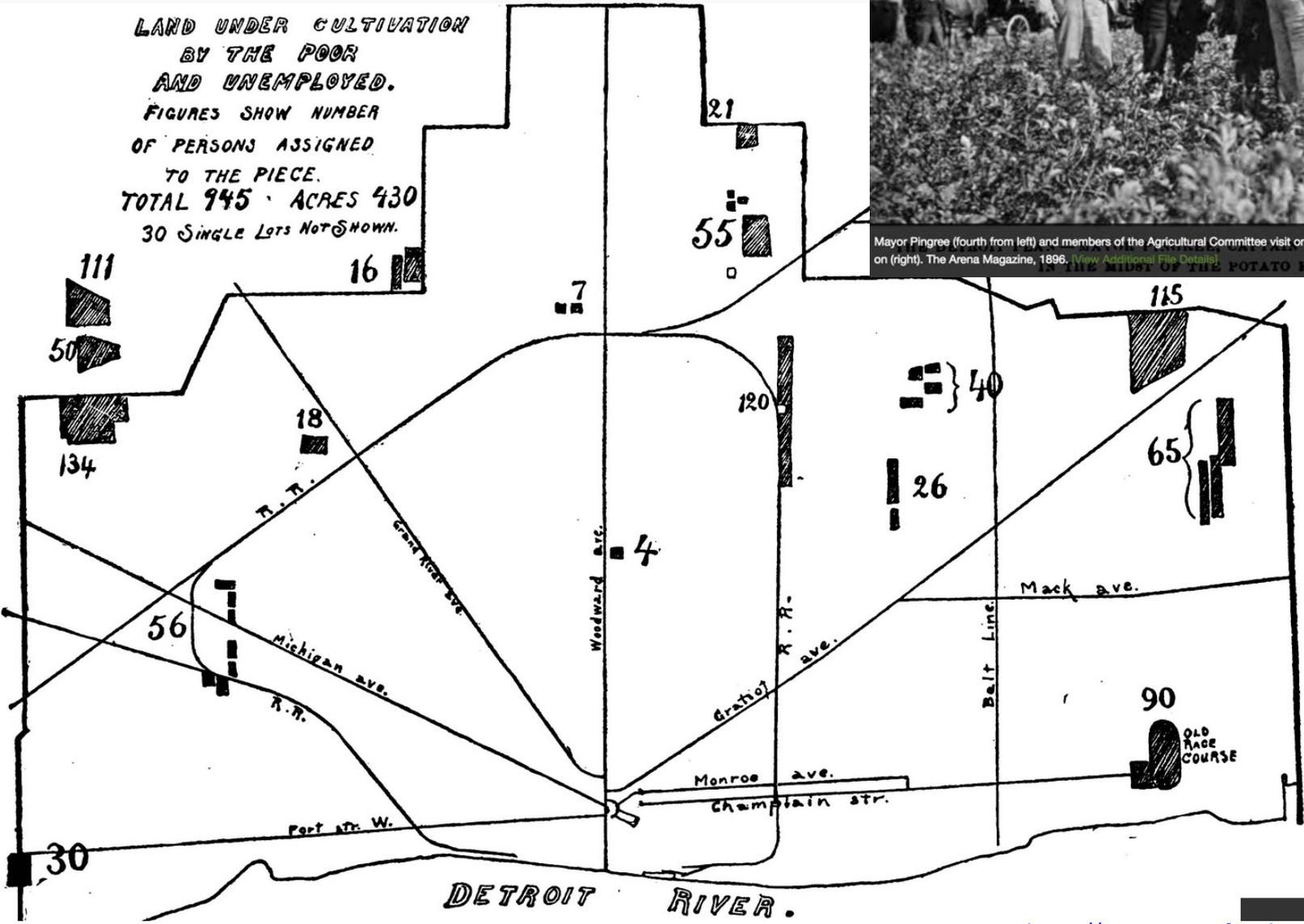
Claiming public space in the city and the food system

Social justice—Community Food Security Coalition

Collection of social movements

# "Potato Patch" gardens, Detroit

LAND UNDER CULTIVATION  
BY THE POOR  
AND UNEMPLOYED.  
FIGURES SHOW NUMBER  
OF PERSONS ASSIGNED  
TO THE PIECE.  
TOTAL 945 ACRES 430  
30 SINGLE LOTS NOT SHOWN.



Mayor Pingree (fourth from left) and members of the Agricultural Committee visit one of the Potato Patches as a gardener looks on (right). The Arena Magazine, 1896. [View Additional File Details](#)

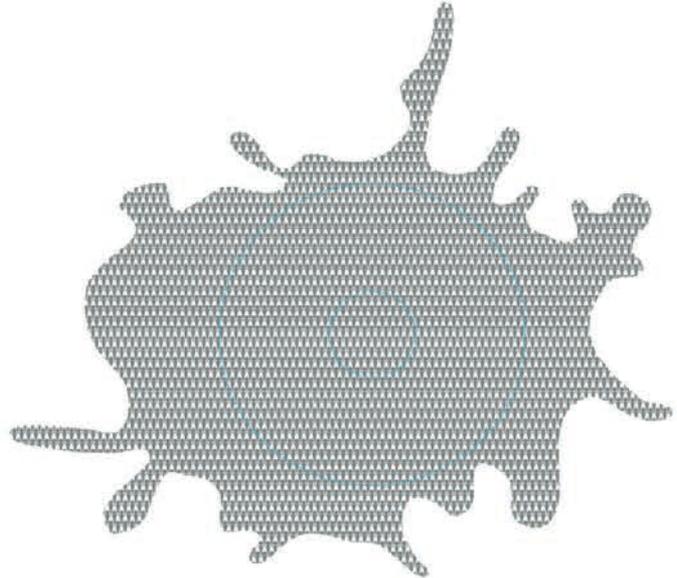


## II. Contemporary conceptions of productive urban landscapes

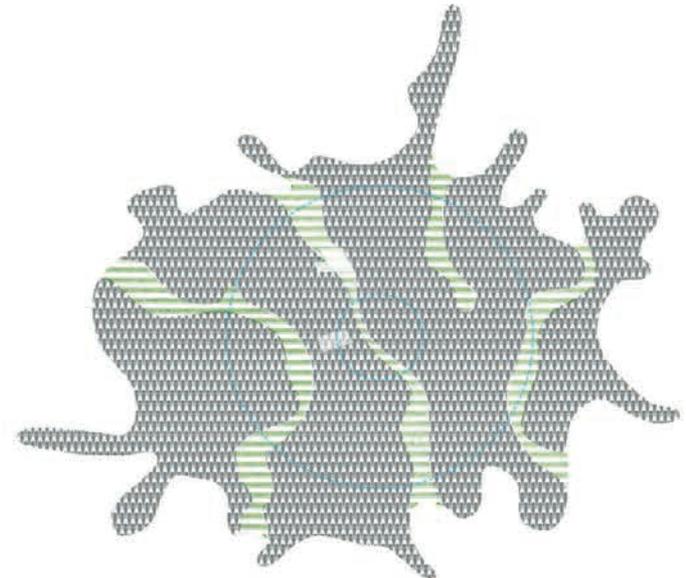
- CPUL's: Continuous Productive Urban Landscapes
- Food Urbanism
- Agricultural Urbanism
- Agrarian Urbanism
- Smartcity
- R-Urban

# Continuous Productive Urban Landscapes (2005)

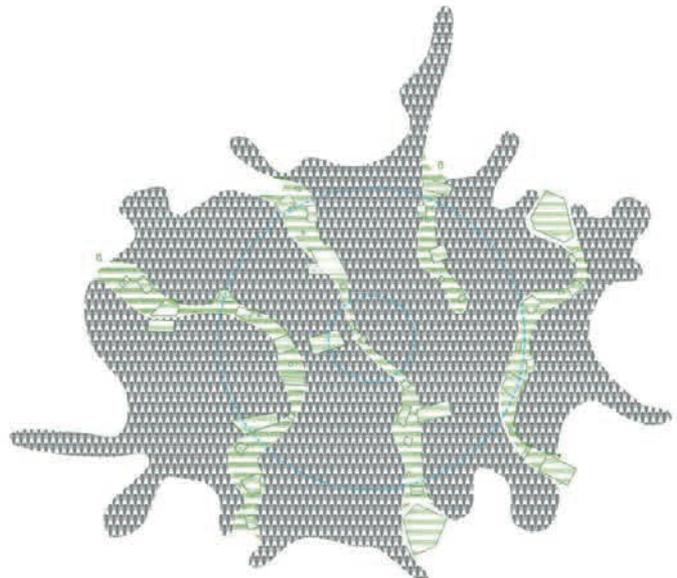




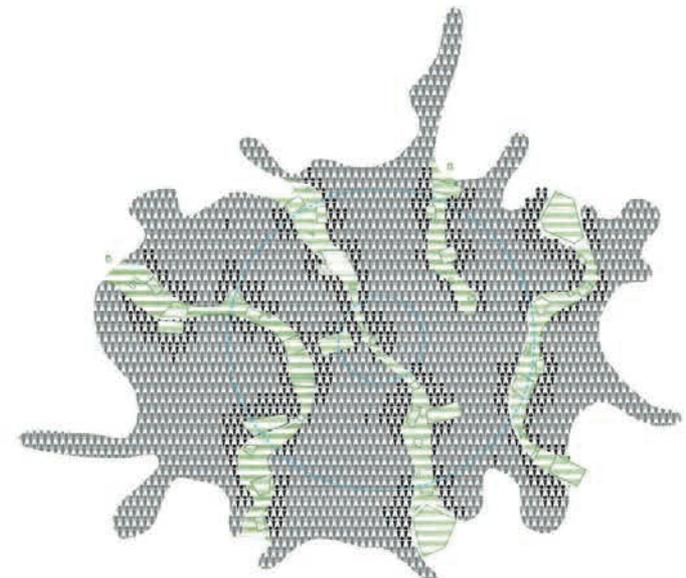
1



2



3



4



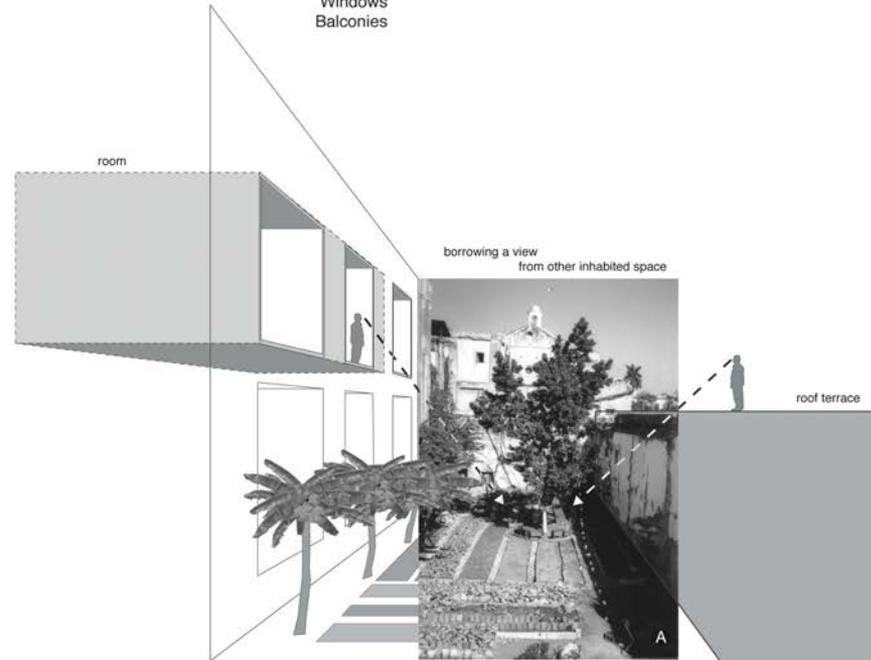
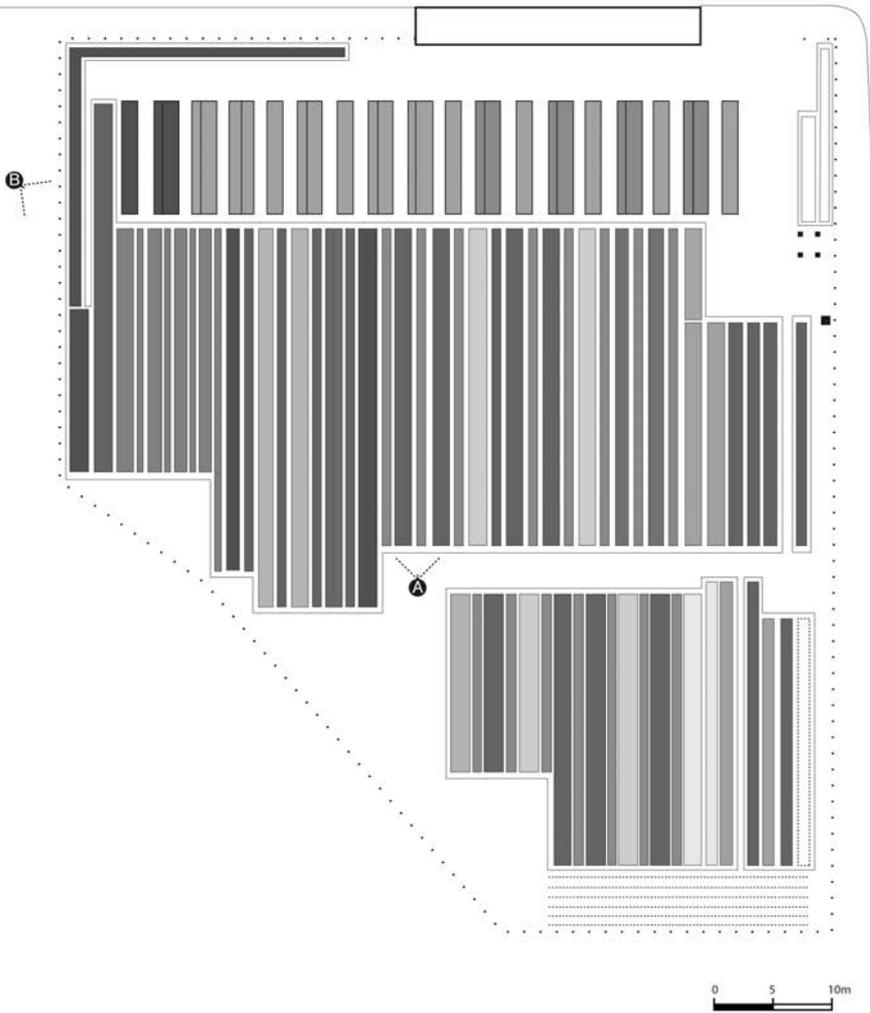


HUERTOS INTENSIVO HABANA,  
MERCED Y PAULA. HABANA VIEJA

CHARACTERISTICS

- Linear micro garden
- Outdoor class room
- Debating chamber
- Valley section
- Marking space with shade
- A shared visual facility
- Terraces
- Windows
- Balconies

This site, in the historic quarter of Havana is managed by Alberto de la Paz. It provides food and functions as an educational facility for local school children, who visit and work on the crops. A tree shades an out door meeting space.



CROPS

tomatoes, cabbage,  
banana trees, onions

MATERIALS

pre-cast concrete floor  
beams, interlocking roof tiles, clay  
Spanish roof tiles, timber, stone, earth.



# Thames Gateway

# Middlesbrough, UK (DOTT 07)

## A productive urban landscape

Use a series of small open spaces for food production thereby connecting the city with the rural, the wild

- \*\* benefit from this new landscape productively in a variety of ways:

**02 movement**

- \*\* improve non-vehicular movement and access by foot or bike throughout the entire town
- \*\* reroute traffic

**03 energy (economics)**

- \*\* use the ground more effectively in economic terms, esp. through new types of urban farming sites
- \*\* provide employment and invigorate districts through productive elements of the new landscape

**04 school**

- \*\* offset the building density with extra large open space to provide children with healthy and self-sufficient activity options
- \*\* improve safety for children with play space weaving through their town

**05 health**

- \*\* offset industrial/noise pollution with contrasting calming and oxygenising open space
- \*\* improve air flow in and out of the city through open corridors

**06 food**

- \*\* plant urban agriculture sites in the heart of the town's working-class and local food
- \*\* improve the quality of life, the food and eating culture by providing space for local production and processing

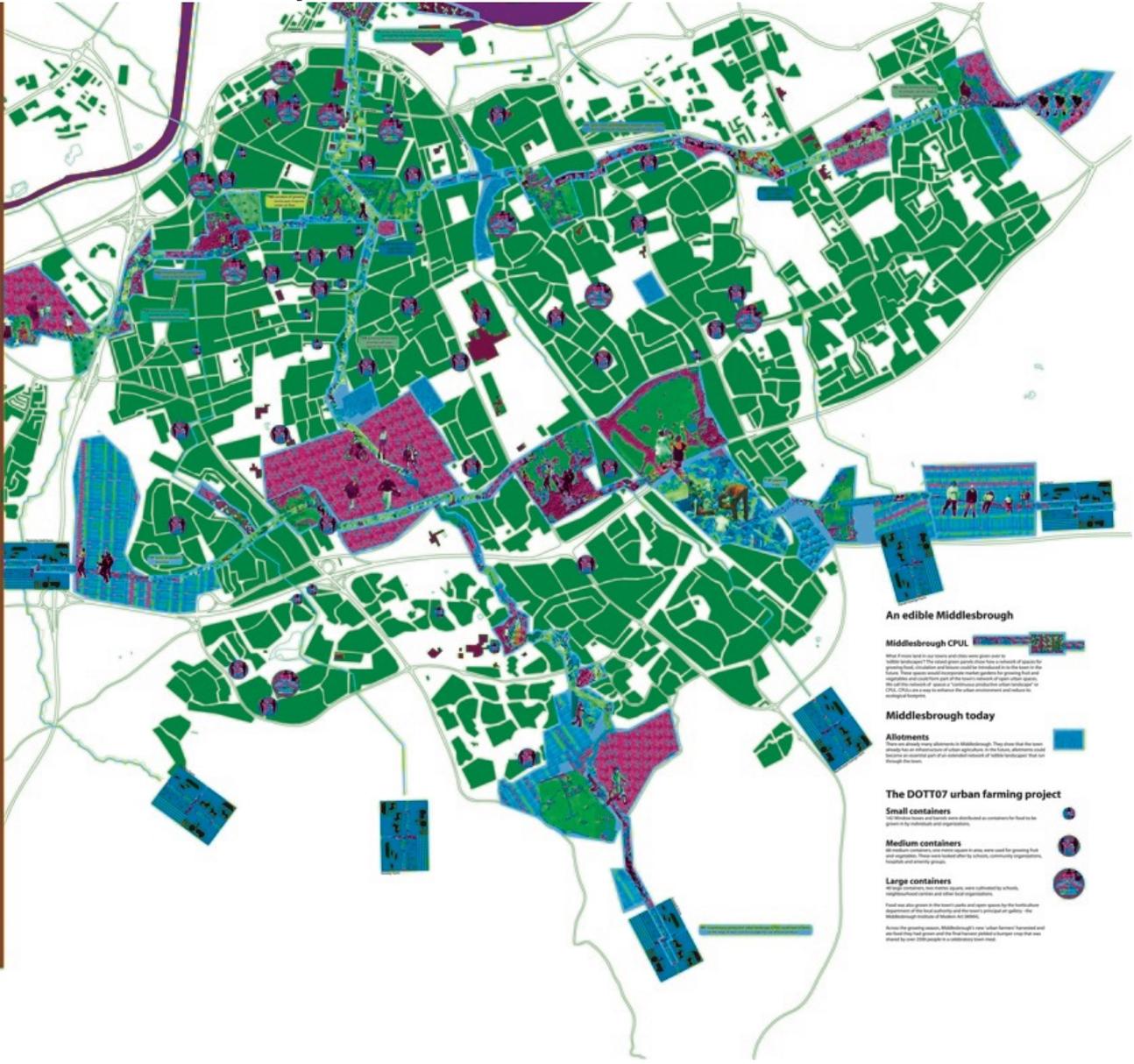
**07 An urban lifestyle**

- \*\* preserve the greenbelt by offering the rural on the urban doorstep (within a CPUL)
- \*\* enhance people's relationship with and enjoyment of nature, the year's seasons and weather

**The DOTT 07 Urban Farming Project in Middlesbrough**

represents the first practical testing of a concept for continuous productive urban landscapes (CPUL). Individuals and organisations participated by growing fruit and vegetables in small, medium and large containers. Over 200 containers were distributed across the city. There was and is a positive acceptance and enthusiasm for urban farming, evidenced by the number of participants who wish to continue growing fruit and vegetables next year and several who wish to expand the area under cultivation. People enjoy being close to edible landscapes.

When imagining how Middlesbrough may develop the CPUL concept in the future, it is important to realize that it does not require everyone to grow their own food. It rather proposes that commercially viable market gardens would form part of the city's network of open urban spaces. In this way, the city would significantly reduce its ecological footprint while at the same time enhancing its urban environment. CPUL provides more experience with less consumption.



**An edible Middlesbrough**

**Middlesbrough CPUL**

What if every leaf in our town and city were green space to 'edible landscapes'? The small green spaces that have a network of growing trees, circulation and water could be transformed to the town in the future. These spaces would be green gardens for growing food and would be a network of open urban spaces for open air and the gathering of people in 'urban production other landscape' or CPUL. CPUL is a way to enhance the urban environment and reduce ecological footprint.

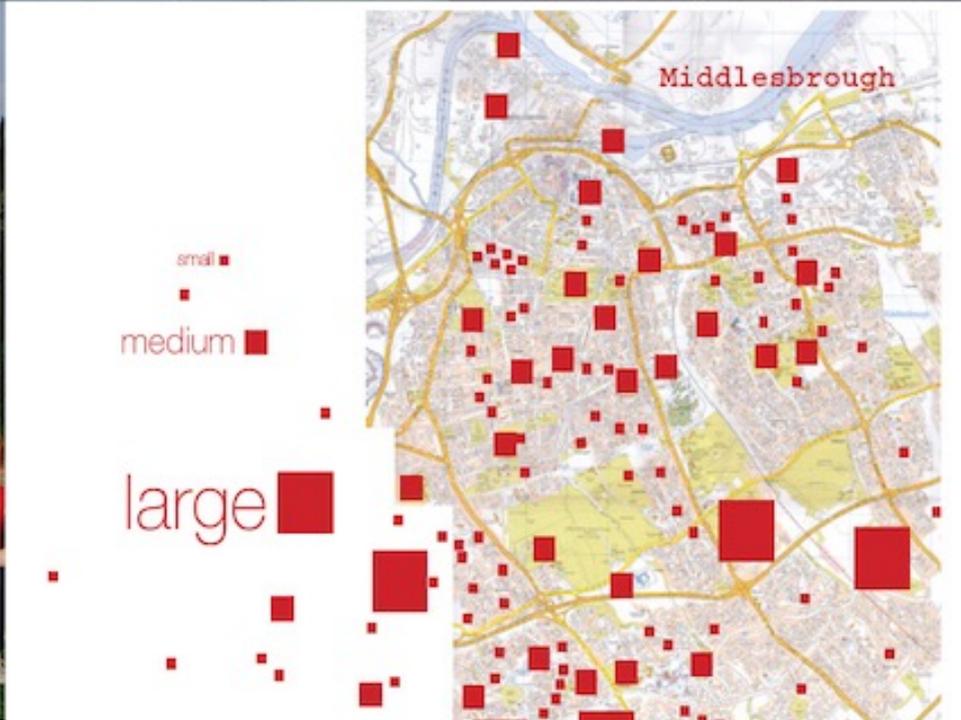
**Middlesbrough today**

**Allotments**

There are currently some allotments in Middlesbrough. These are the best example of a small part of an edible landscape of urban production and other landscape.

**The DOTT07 urban farming project**

- Small containers**  
100 medium and large containers were distributed throughout the town to be grown in by individual participants.
  - Medium containers**  
100 medium containers were made up to be used for growing fruit and vegetables. These were placed at various community organisations, schools and other groups.
  - Large containers**  
100 large containers were placed by schools, neighbourhood centres and other local organisations.
- Food was also grown in the town parks and open spaces by the horticulture department of the local authority and the local authority of quality - the Middlesbrough Horticulture Centre.
- During the growing season, Middlesbrough's own urban farming landscape and the food that had grown and the first harvest public market (open air) was shown to 2000 people in Middlesbrough town.



## Middlesbrough, UK (DOTT 07)

*CPUL Continuous Productive Urban Landscape*

# Food Urbanism Initiative (2011-)





## Annex Organics Rooftop Garden & Field to Table

**LOCATION / USE** Toronto, Canada  
**ABOUT** 2010  
**DESCRIPTION** The Annex Organics Rooftop Garden & Field to Table is a community-based initiative that provides fresh, locally-grown produce to the surrounding neighborhood. The garden is located on the rooftop of a building in the Annex neighborhood of Toronto, Canada. It is a 1,000 sq ft garden that is managed by a group of volunteers. The garden produces a variety of vegetables, including tomatoes, cucumbers, and leafy greens. The produce is then distributed to a community kitchen, where it is used to prepare meals for the homeless and low-income residents of the neighborhood. The garden is a great example of how urban agriculture can be used to address food insecurity and build community.

**DATE** 2010  
**CREATED BY / OWNER** The Annex Organics  
**FEATURES** The garden is a great example of how urban agriculture can be used to address food insecurity and build community. It is a community-based initiative that provides fresh, locally-grown produce to the surrounding neighborhood. The garden is located on the rooftop of a building in the Annex neighborhood of Toronto, Canada. It is a 1,000 sq ft garden that is managed by a group of volunteers. The garden produces a variety of vegetables, including tomatoes, cucumbers, and leafy greens. The produce is then distributed to a community kitchen, where it is used to prepare meals for the homeless and low-income residents of the neighborhood.



**FOOD**  
URBANISM  
INGRÉDIENTS

## Type de site



A1 Surface urbaine cultivée



A2 Alentour des habitations collectives



A5 Toiture végétalisée accessible



A10 Bord de cours d'eau



A13 Arrêt de transport public



A18 Espace de liaison en talus



A3 Alentour des habitations privées



A6 Toiture non accessible



A11 Bord d'étendue d'eau



A14 Boulevard



A19 Friche ferroviaire



A4 Balcon



A7 Parc et jardin urbain



A12 Lisère de forêt



A15 Chemin / route



A20 Friche industrielle



A8 Place urbaine



A16 Bord de voie ferrée



A21 Site vacant / sous-utilisé



A9 Surface sportive



A17 Bord de route / Autoroute

## Type de cultivateur

Activate



B1 Activate d'intervention éphémère



B2 Activate d'appropriation



B5 Meso-producteur collectif



B6 Culti-vendeur collectif

Amateur



B3 Micro-producteur privé



B4 Meso-producteur individuel



B5 Meso-producteur collectif



B6 Culti-vendeur collectif

Apprenant



B7 Enfant en formation



B8 Personne en formation



B9 Personne en intégration/insertion/réhabilitation



B10 Formateur

Professionnel



B11 Salarié-employé



B12 Salarié et gérant de structure collective



B13 Indépendant



B14 Entrepreneur

## Motivations



C1 Lucratif



C2 Pédagogique



C3 Personnel



C4 Social



C5 Environnemental



C6 Esthétique



C7 Bien-être

## Entité de production

Individuelle



D1 Jardin confesseur



D2 Jardin privé



D3 Plantage



D4 Jardin familial



D9 Jardin collectif



D10 Jardin d'institution



D18 Ferme de bureau

Collective



D5 Jardin à parc public



D6 Jardin thérapeutique



D7 Bord de route / chemin de fer



D8 Lisère de forêt



D9 Jardin collectif



D10 Jardin d'institution



D18 Ferme de bureau

Professionnelle



D12 Jardin temporaire



D13 Jardin pour grande cuisine



D14 Jardin de restaurant



D15 Ferme urbaine



D16 Serre



D17 Serre (aquaponique / hydroponique)



D18 Ferme verticale

## Échelle



Object



2-200 m<sup>2</sup>



200-2000 m<sup>2</sup>



2000-20 000 m<sup>2</sup>



2-20 ha

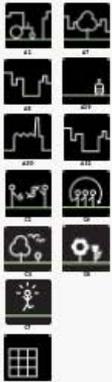


20 ha +

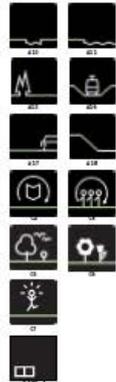
# TYPOLOGIES URBAINES



Coeur



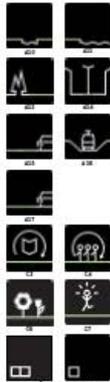
Espace de transition



Tentacule



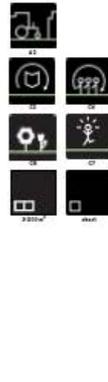
Accès poreux



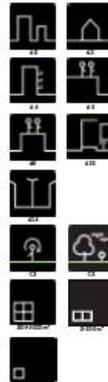
Corridor



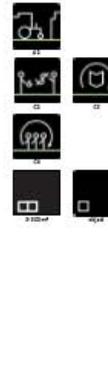
Poche d'activité



Poche verte



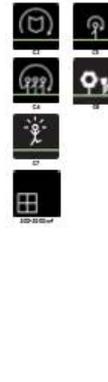
Structure d'échange



Point de vue



Bâtiment



De grands espaces de culture agricole comme stratégie de récupération urbaine.

### INGRÉDIENTS

- > parcelle maraîchère
- > verger
- > vigne
- > espace didactique
- > serre/tunnel
- > pâturage
- > prairie
- > jachère
- > basse-cour
- > ferme urbaine

### LIGNES DIRECTRICES FUI

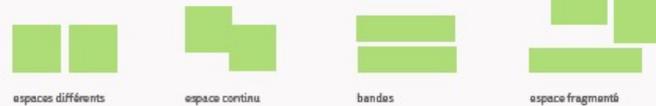
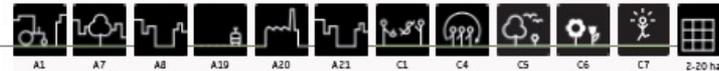
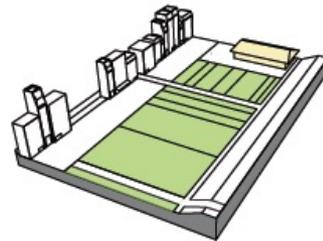
- > assurer la flexibilité et la rotation des cultures
- > intégrer les cultures aux espaces publics
- > promouvoir un partenariat avec les organismes locaux
- > diversifier les modes de gestion et les structures productives à travers le parc
- > assurer la visibilité du coeur productif depuis l'extérieur du site
- > concentrer les bâtiments agricoles à proximité des cultures
- > adapter la forme des cultures aux différents espaces et fonctions du site

### OBSTACLES

- > répercussions environnementales négatives
- > peut créer une barrière physique
- > nécessite un sol riche, fertile et sain
- > rupture d'échelle entre les cultures et les quartiers résidentiels
- > protection contre les polluants: distance minimale de 10 mètres entre les cultures et les routes
- > disponibilité des terrains

### RÉFÉRENCES

- > Bieslandse Bovenpolder, Holland
- > Lout Park, Vancouver, Canada
- > Downsviow Park and Food-Cycles CSA

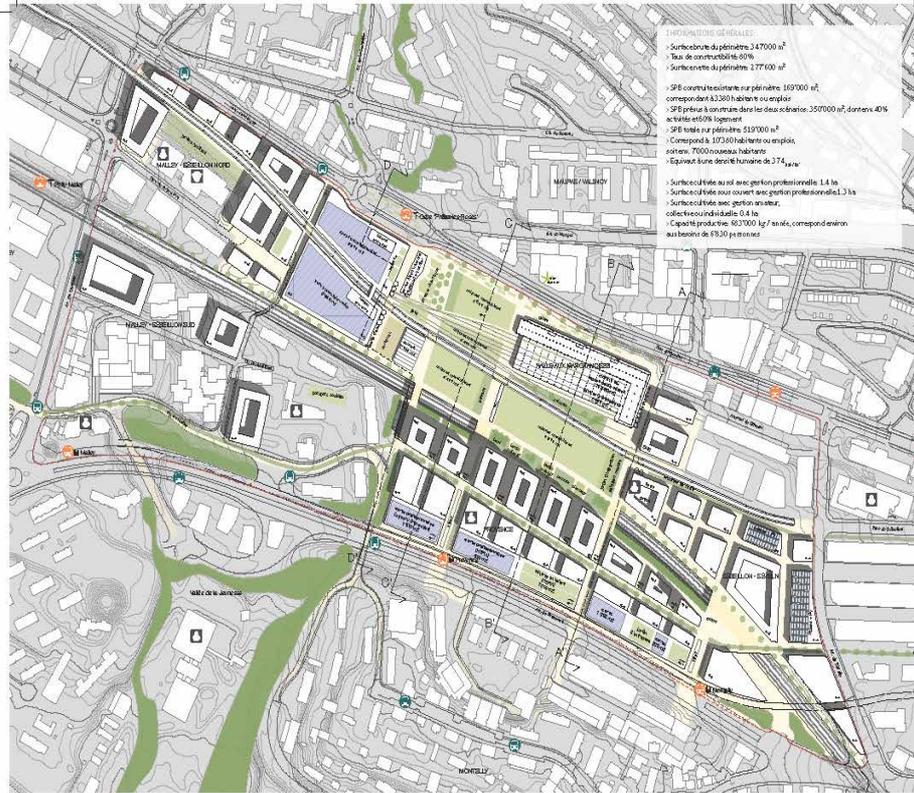


renforcer l'identité d'un quartier par des stratégies végétales

catalyser le développement économique par la production

protéger et améliorer la biodiversité locale

encourager la production alimentaire urbaine



03

SCÉNARIO - MEDIUM

ÉTUDE DE CAS

FLE: Requalification urbaine de grande échelle, Sablonville/Milly/Luxemville



ÉCHELLE 1:2000  
0 10 20 30

- Périmètre
- Équipement santé
- Équipement sport
- Zones collectives/parcs
- Cultures nouvelles
- Semés en voiture
- Formation Santé
- Culture
- Ligne de tramway
- Ligne de bus
- Entrée de parking

01

CARTE STRATÉGIQUE

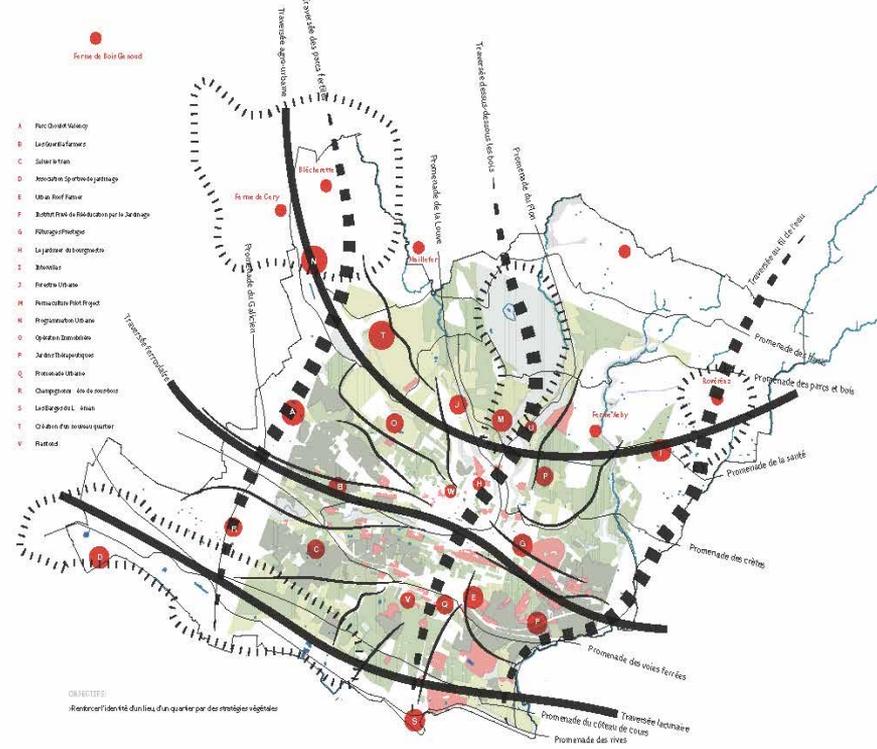
AMPLIFIER L'IDENTITÉ PAR LES FRUITS ET LES LÉGUMES

FLE: Requalification urbaine de grande échelle, Sablonville/Milly/Luxemville



ÉCHELLE 1:10000  
0 100 200 300

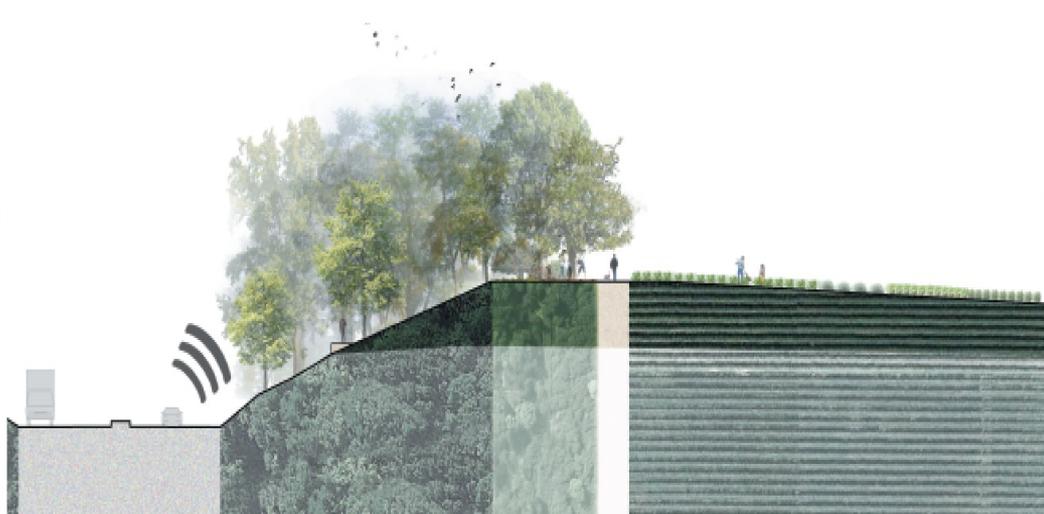
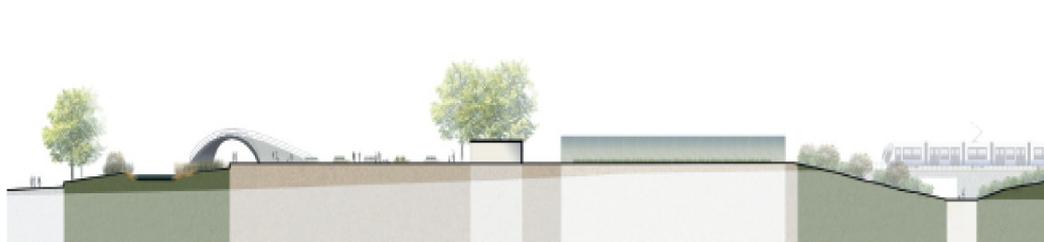
- Niveau d'identité urbain
- Promenade
- Terraces paysannes
- FILM
- Projet FLE
- Ferme d'identité
- Centre de 1896
- Végétal
- Champ
- Ferme







**PARC AGRO URBAIN**  
**(Verzone Woods)**

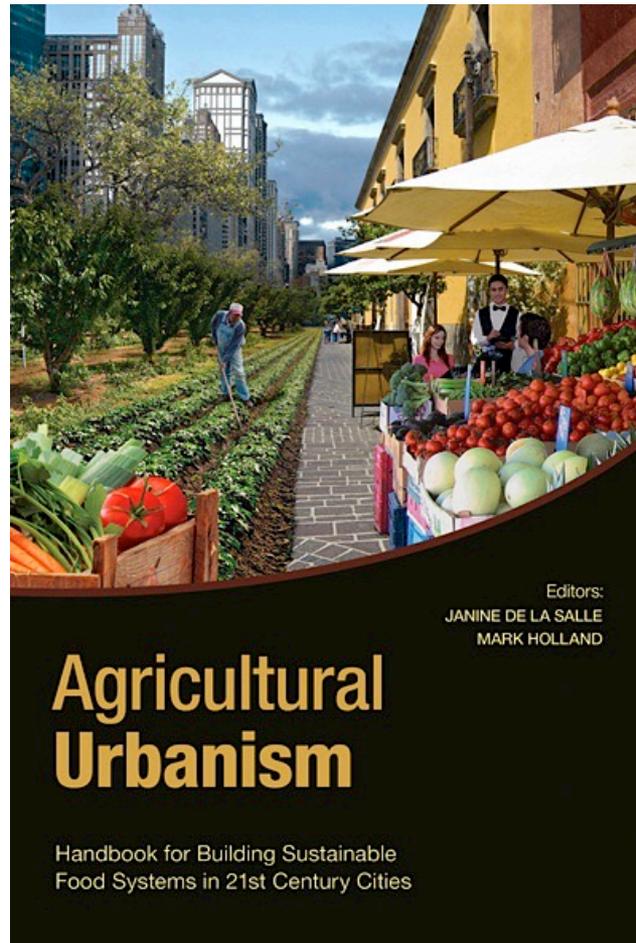


1b



PARC AGRO URBAIN (Verzone Woods)

# Agricultural Urbanism (2010)



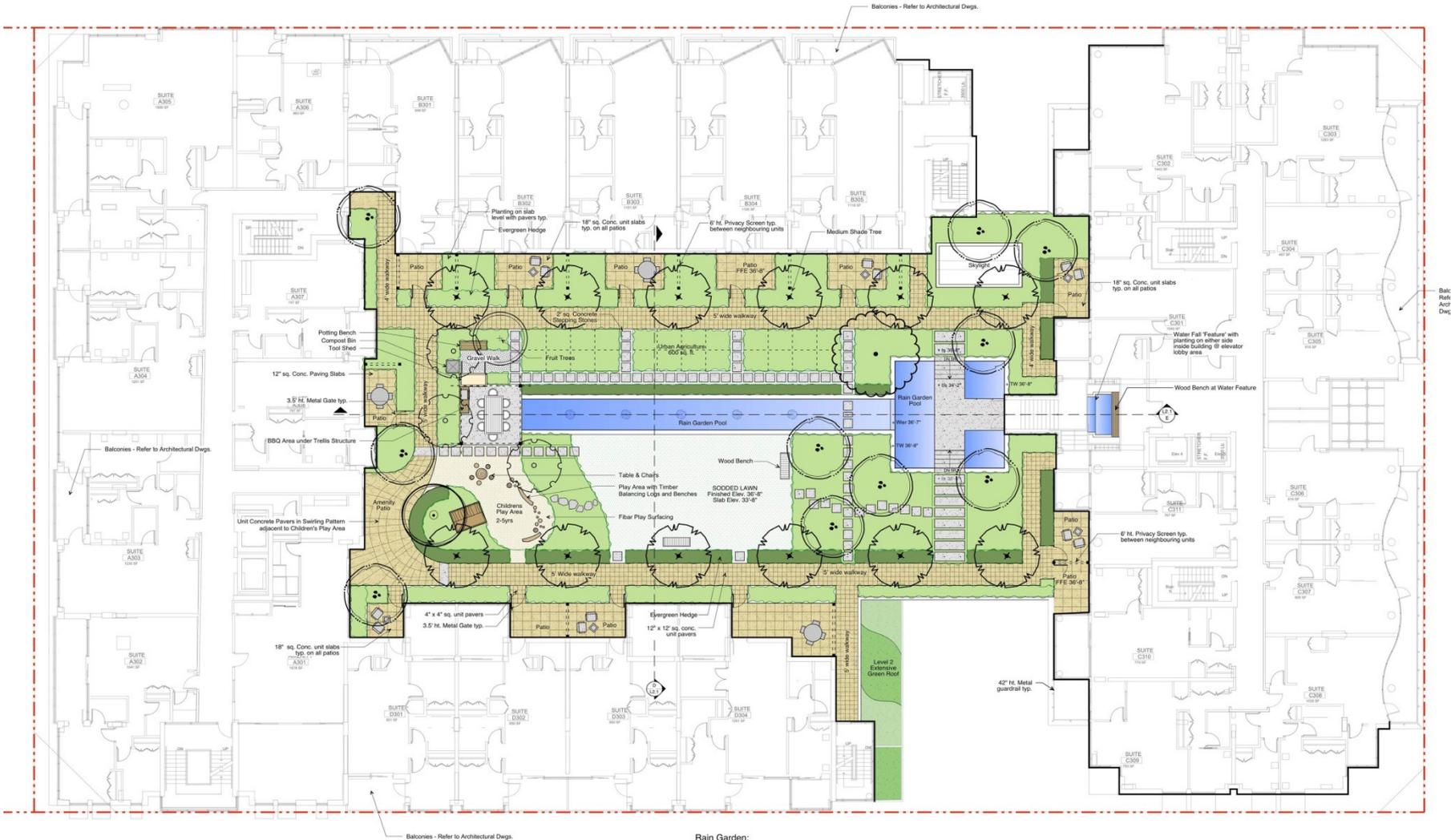
Editors:  
JANINE DE LA SALLE  
MARK HOLLAND

## Agricultural Urbanism

Handbook for Building Sustainable  
Food Systems in 21st Century Cities



# Southeast False Creek Urban Agriculture Design Guidelines



**Rain Garden:**

A portion of stormwater run off from the roof levels is directed to rainwater leaders that drain into rain garden pools & channels. Water is filtered through pools and channels and then over flows into the irrigation cistern. Cistern water is constantly pumped through the rain gardens to maintain water quality.

## Urban Village

A compact, mixed-use, urban node focused on a waterfront, commercial street and plazas, which is surrounded by multi-family residential buildings.

**1. Production:** Roof top gardens provide the opportunities for shared food production by residents. Other areas include:

- Window box gardens and balconies allow areas to grow food;
- Community gardens
- Locations for fruit bearing trees
- Parks and plazas
- Street medians and boulevards
- Allies
- Vacant lots

**2. Processing:** takes place throughout the urban village:

- Restaurants and cafes
- Home kitchens
- Community kitchens
- Bakeries and deli's
- Small operator processing facilities and storage

**3. Distribution:** Local farm trucks from grows at the market help connect the urban village to food harvesting and retailing activity by providing a visual link. Other forms of moving food within the village include:

- Automobiles, bicycles and walking
- Storage facilities will include pantries and refrigerators
- Wholesale distribution and direct marketing

**4. Retail:** a fisherman's wharf offers a place to buy local seafood. Other retail opportunities include:

- Seasonal farmers market
- Street vendors
- Restaurants and cafes
- Neighbourhood grocer and corner store

**5. Consumption + Celebration:** sidewalk cafes and restaurants have patios that line the waterfront, providing a hub of activity. Other places to celebrate food include:

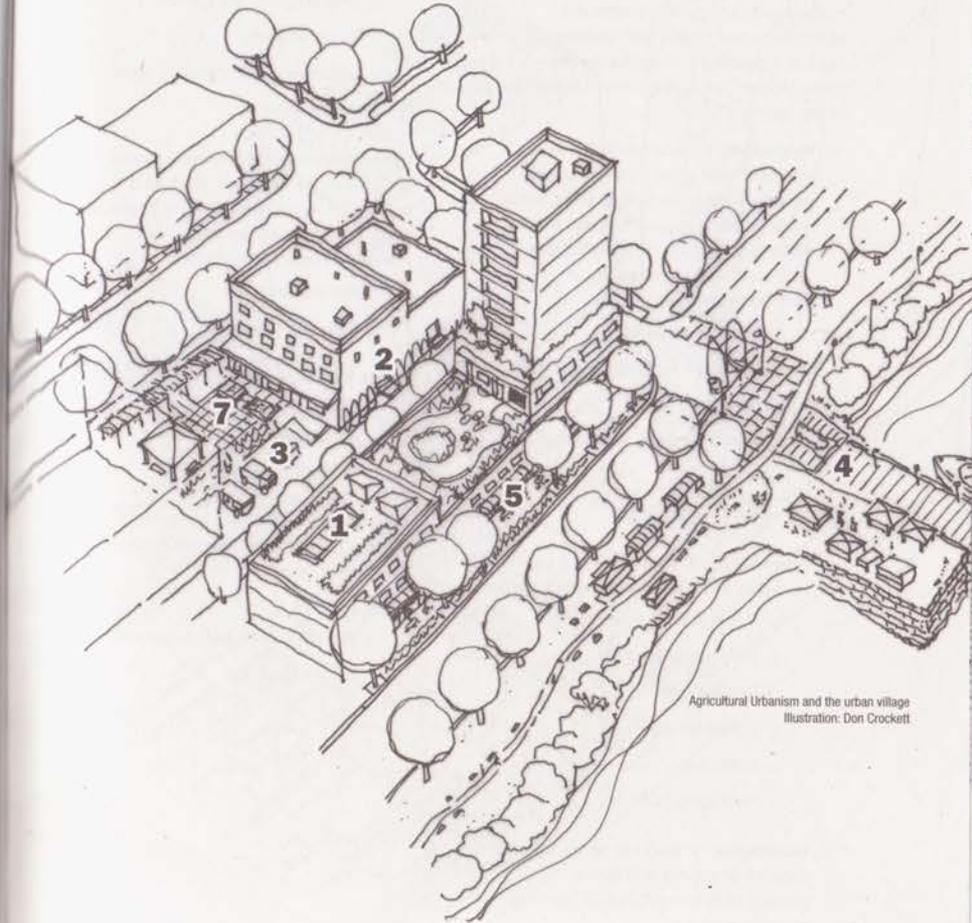
- Street vendors near places to sit and eat comfortably
- Closing a street for a food festival

**6. Waste Recovery (not shown):**

- Municipal collection and composting program
- Rainwater collection

**7. Education:** a weekend farmer's market is a place where one can meet local growers and learn about food. Further examples are:

- Schools
- Community gardens
- Grocers, chefs and restaurants



Agricultural Urbanism and the urban village  
Illustration: Don Crockett

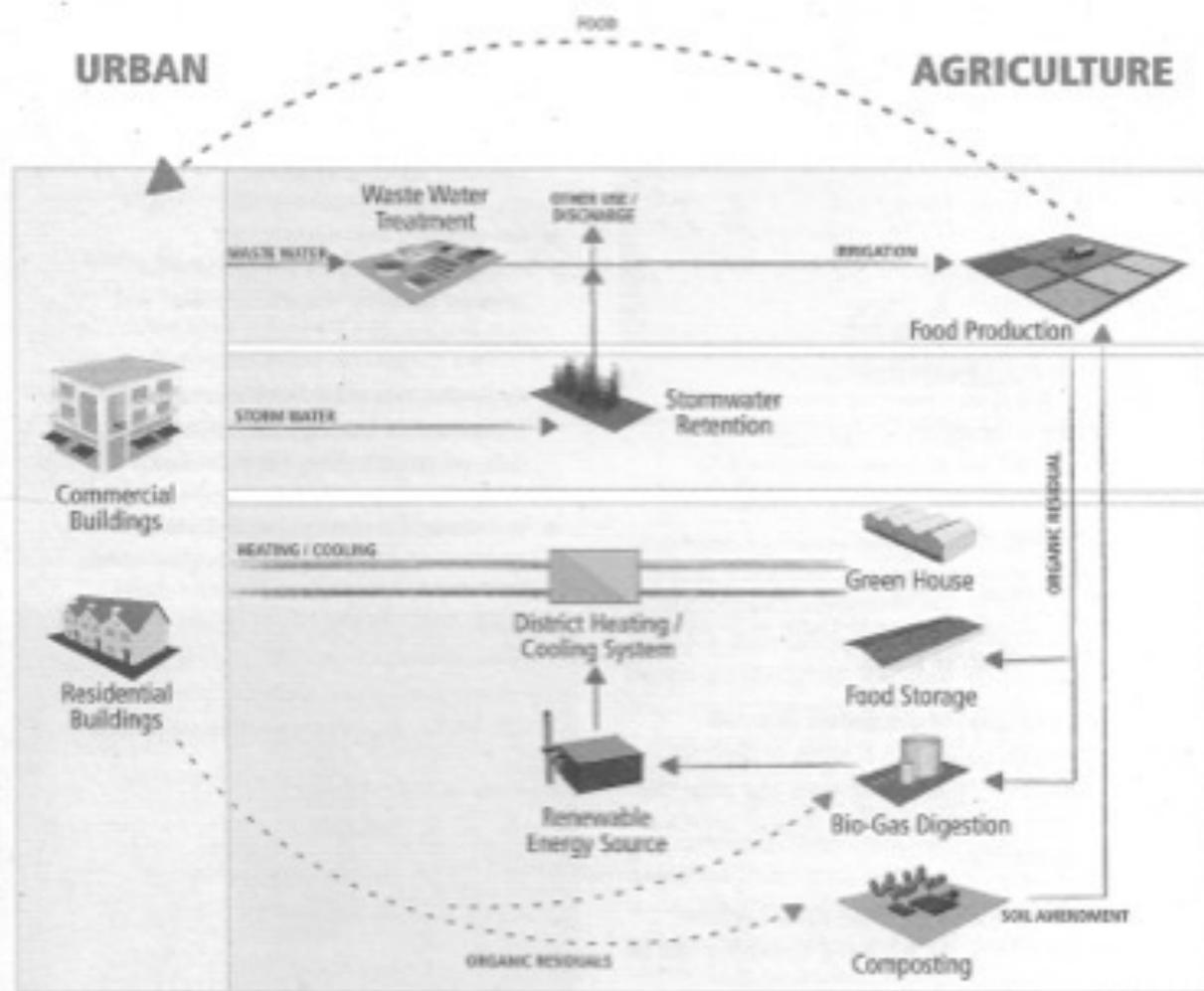
Urban Program, Unit, and Scale		Agricultural Program, Unit, and Scale		
Complete range of urban services: live, work & play; access to regional transportation network & park system	PEDESTRIAN-SHED	160+ acres (65+ hectares)	SECTION	Complete range of crops, including production at scale of grains, legumes; livestock & dairy; forestry & NTFP viable
Pedestrian-friendly mix of land uses & services, including neighbourhood-scale commercial, social gathering spaces	NEIGHBOURHOOD	40+ acres (16+ hectares)	QUARTER SECTION	Small scale grain & livestock production; specialty forestry products; fully diversified "homestead"
Mix of housing types; pedestrian circulation to access larger neighbourhood services/amenities	BLOCK	5+ acres (2+ hectares)	FARM	Commercial orchard operation; scale affords wholesale market potential of variety of crops
Designated land use, defining neighbourhood "function," open space	SITE / PARCEL	1+ acres (0.4+ hectares)	LARGE GARDEN / SMALL FARM	Mixed produce & small fruit production; small scale orchard; typical "farm unit"
Residential / Commercial unit(s); access	LOT	1/8+ acres (0.05+ hectares)	GARDEN PLOT	Micro-share CSA; specialty crops
Open space / Recreation	YARD	400+ sqft (37+ sq m)	ROW	Kitchen garden

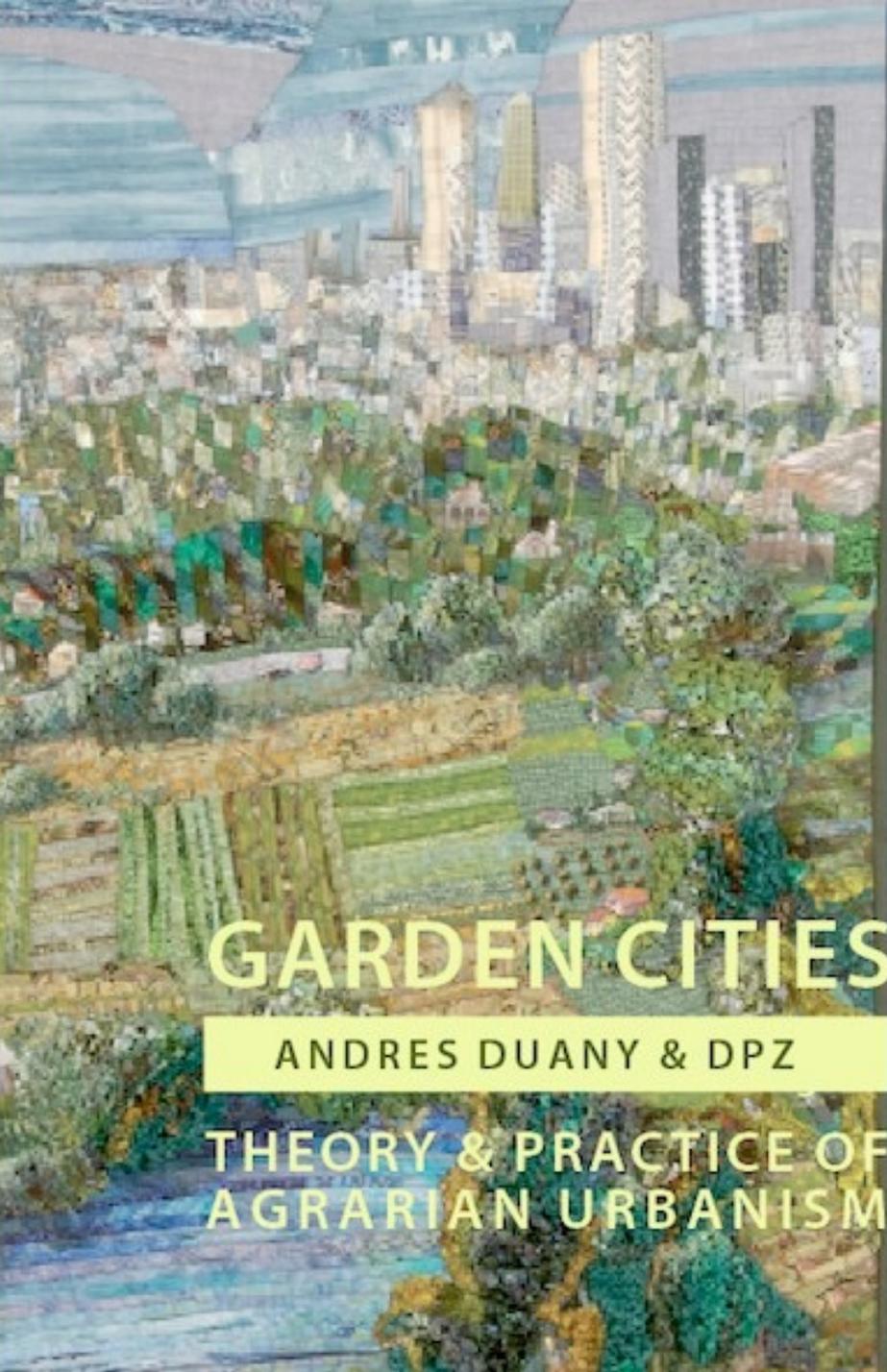
from regional planning to placemaking

from the human body to place

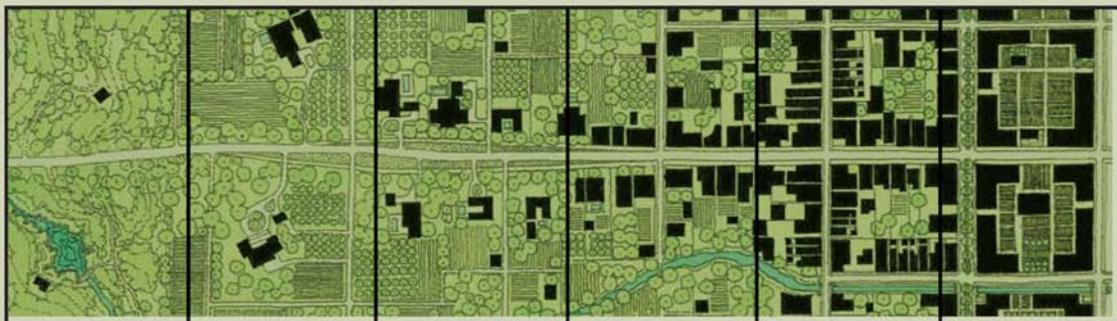
Figure 16.2 Urban & Agricultural Programs as Related by Unit and Scale  
 Source: Edward Porter

urban and agricultural programs as related by unit and scale



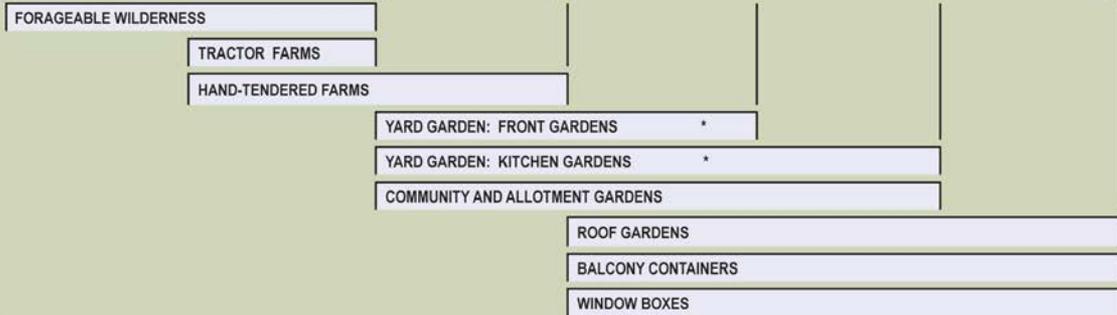


# **Agrarian Urbanism (2011)**



**T1** NATURAL ZONE    **T2** RURAL ZONE    **T3** SUB-URBAN ZONE    **T4** GENERAL URBAN ZONE    **T5** URBAN CENTER ZONE    **T6** URBAN CORE ZONE

RURAL AG    PERIURBAN AG    INTRAURBAN AG

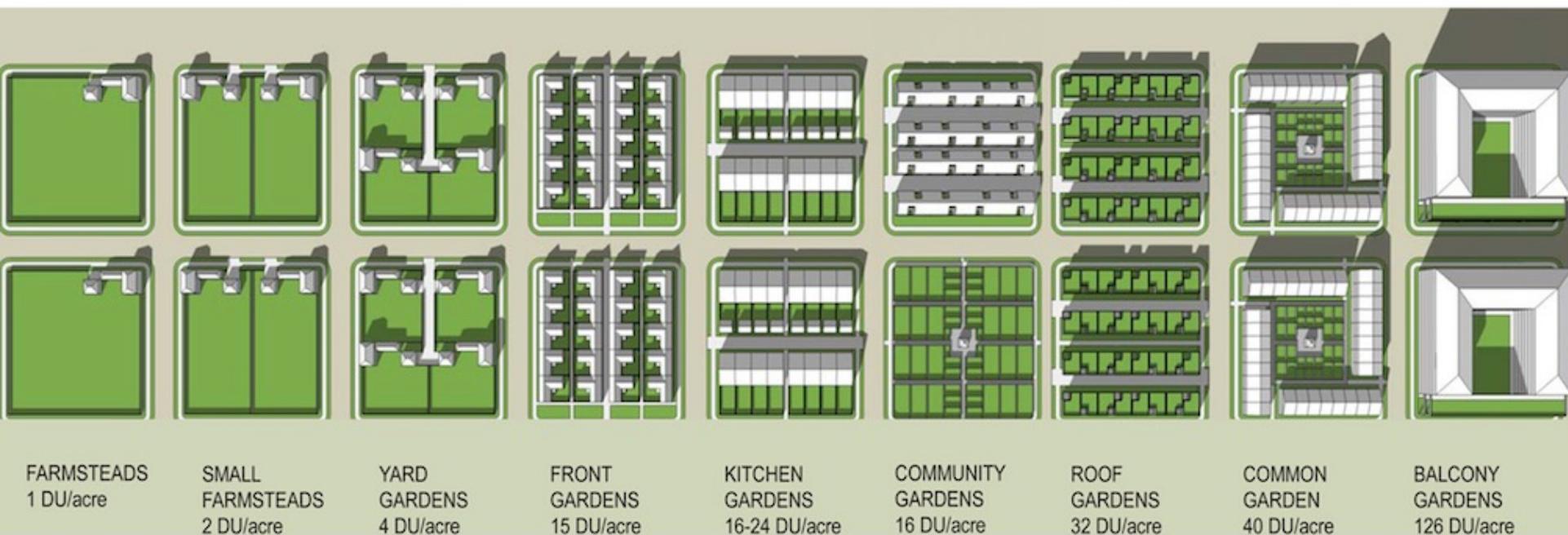
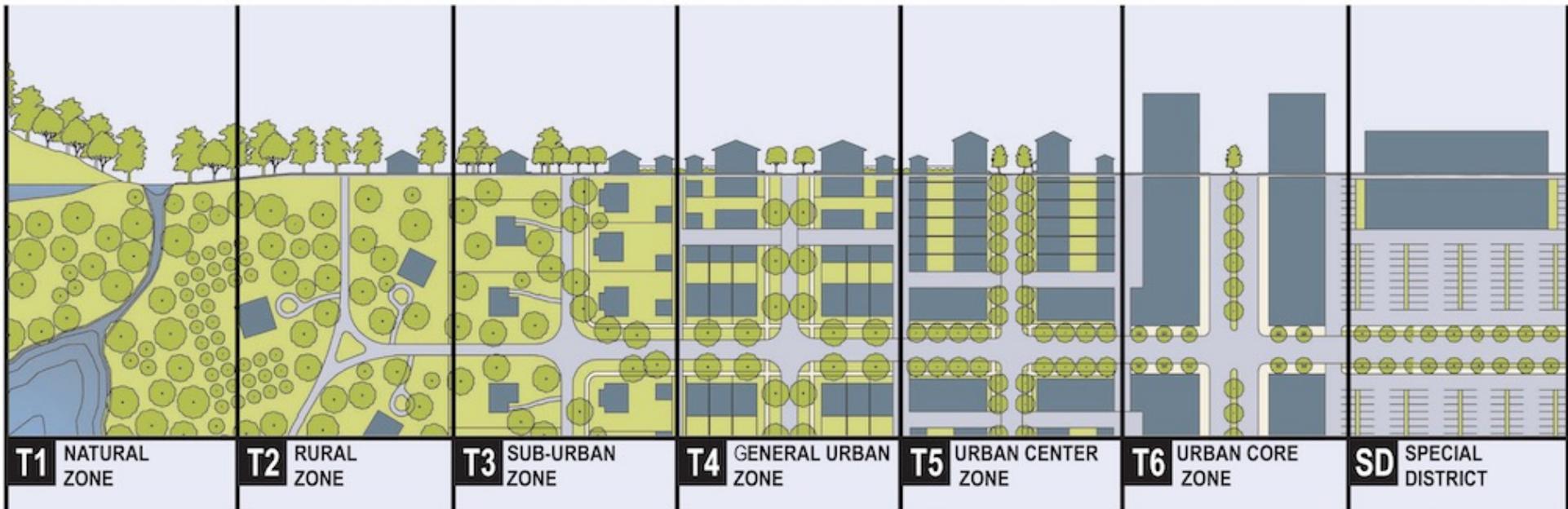


GAME MEAT: pheasant, venison, hare, rabbit, pigeon,			
NUTS: hazel, walnut			
BERRIES: blackberry, elderberry, whinbery, sloe			
FUNGI: mushroom			
SKINS / HIDES			
BRASSICAS: cabbage, cauliflower, broccoli, sprouts			
ALLIUMS: garlic, onions, leeks			
ROOT CROPS: potato, carrot, parsnip, swede			
SALADS: lettuce, radish, cucumber, tomato		SOME SALADS: lettuce, tomato in containers	
HERBS: mint, basil, thyme, rosemary			
MARROWS AND SQUASHES			
LEGUMES: peas, runner beans, broad beans	LIMITED LEGUMES: runner beans on walls		
SOFT FRUIT AND BERRIES: plums, cherries, raspberries, strawberries, rhubarb			
TOP FRUIT: apples, pears	LIMITED TOP FRUIT: trees in gardens		
CEREALS: wheat, oats, barley			
MEAT: beef, lamb, pork, poultry			
LIVESTOCK PRODUCTS: eggs, milk, cheese, cream, yogurt, wool, honey	SMALL SCALE PRODUCTION: egg, honey	VERY SMALL SCALE PRODUCTION: egg	

Food production along transect

PRODUCTION

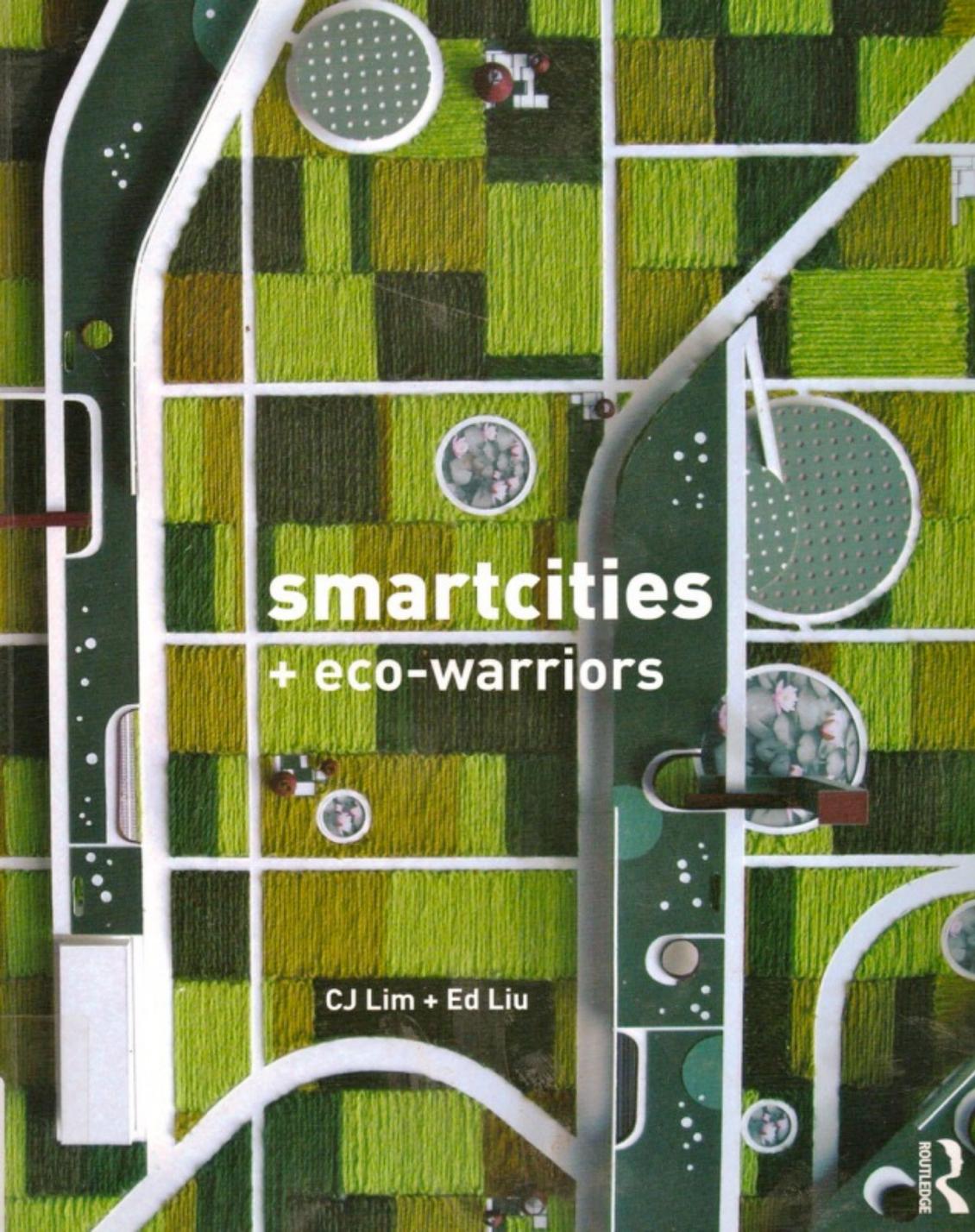
PRODUCTS



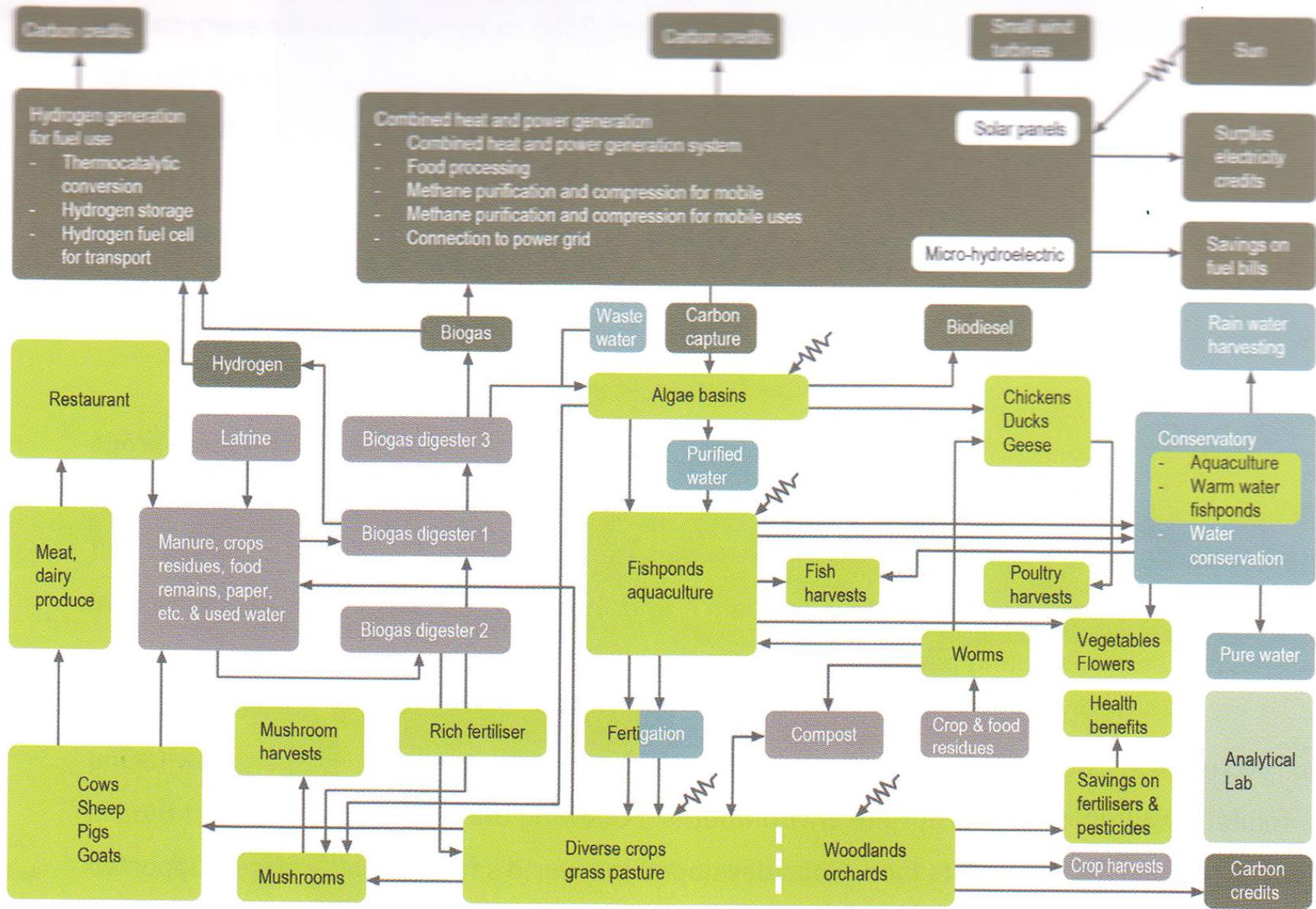
Typology of productive landscapes along transect



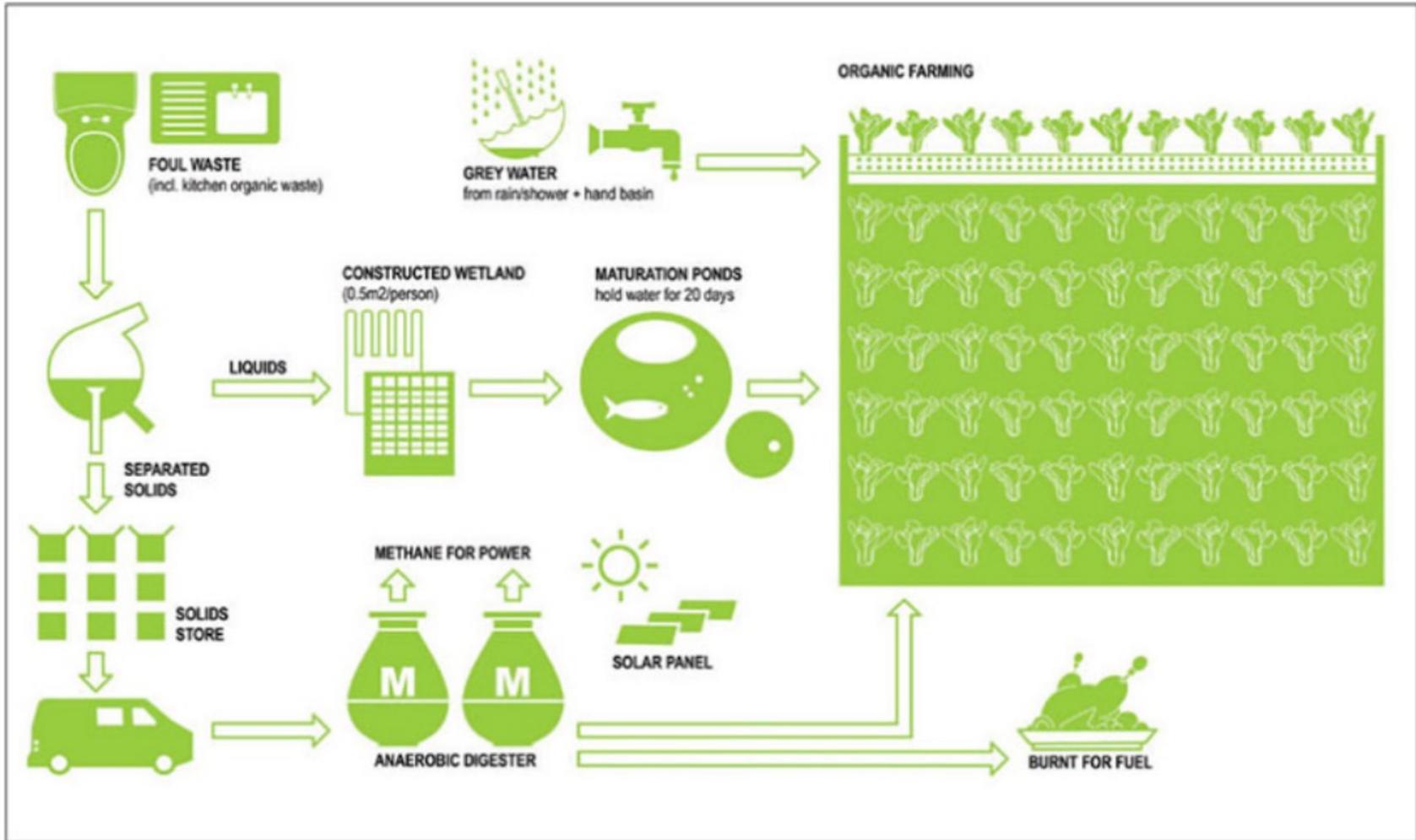
Plug-in agriculture at urban edge



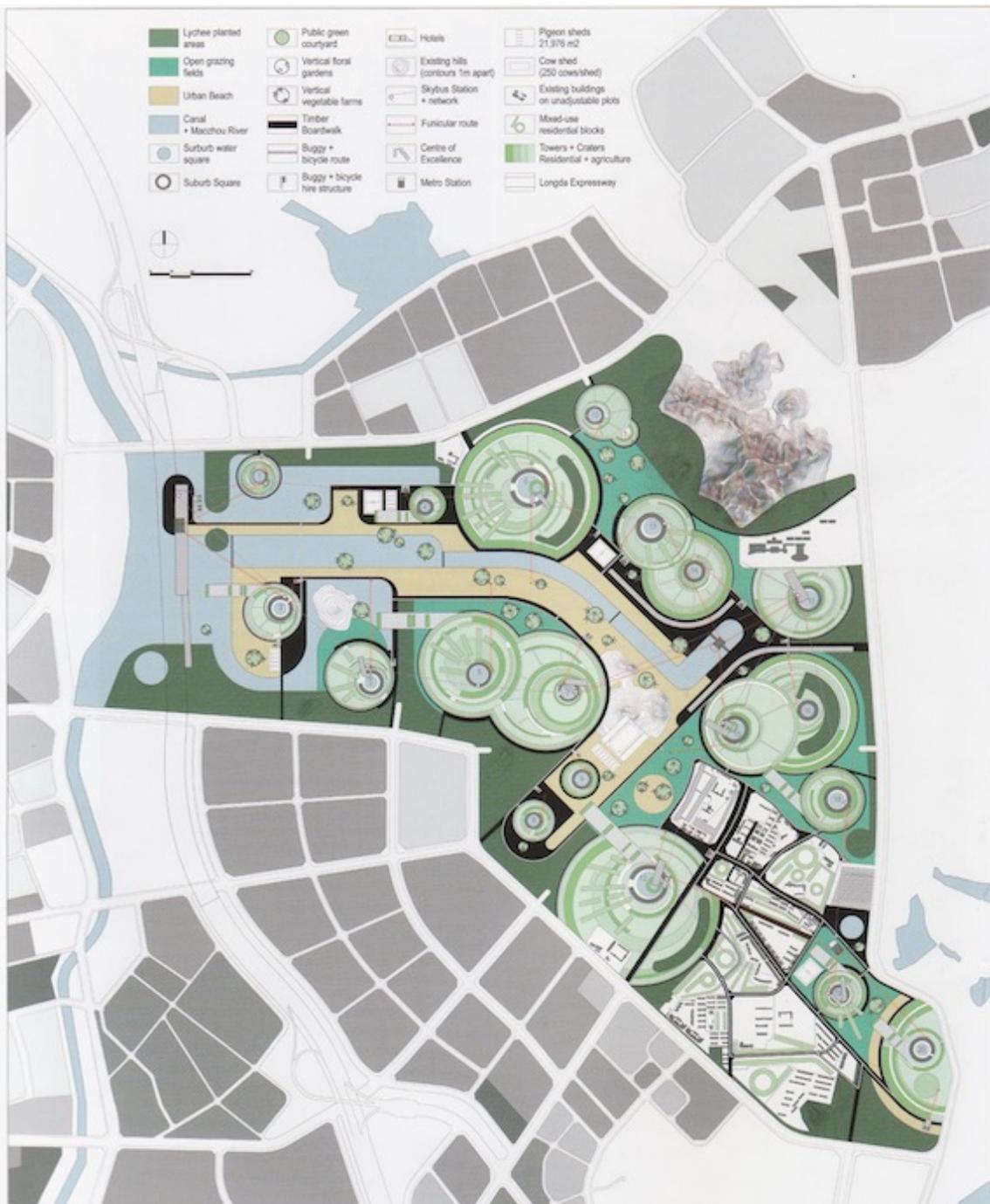
# Smart Cities (2010)



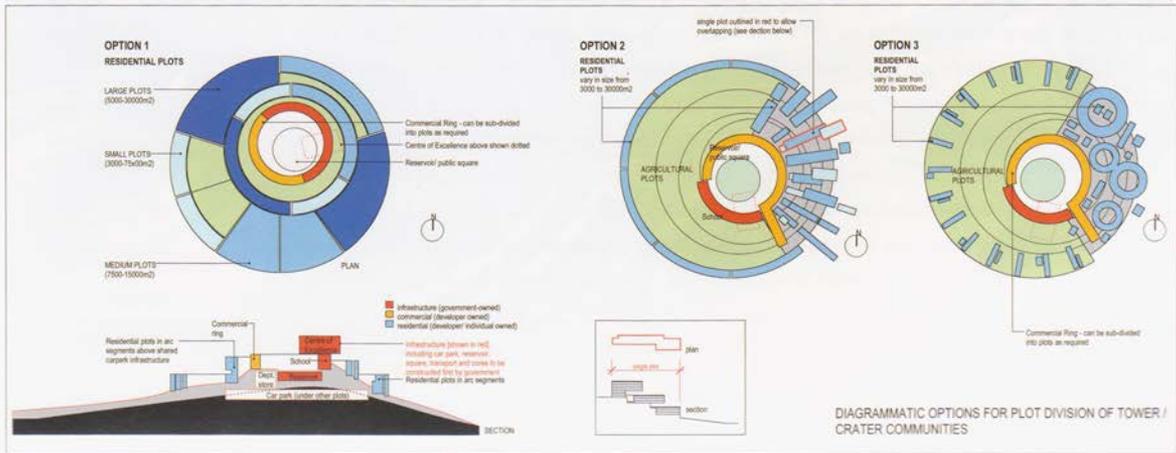
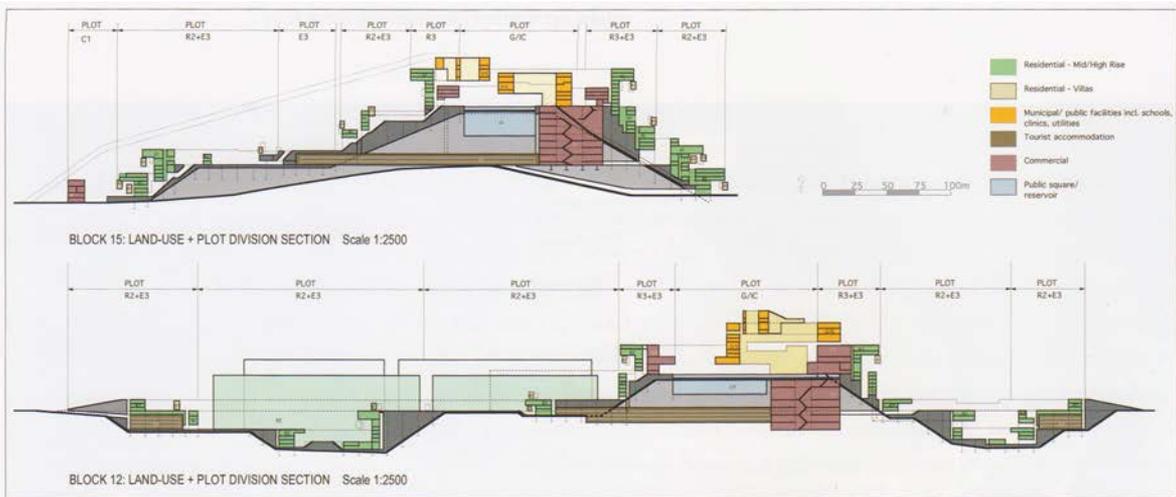
Dream farm systems diagram



Perpetual motion machine



# Guangming Smartcity



# R-Urban

R-Urban est une stratégie de résilience urbaine participative. Le projet propose la création de réseaux locaux et de circuits courts écologiques, sociaux et économiques autour d'une série d'unités collectives citoyennes. Celles-ci accueillent des pratiques urbaines productives : recyclage des déchets, énergie partagée, éco-construction, agriculture urbaine, habitat participatif, transport doux. R-Urban ouvre sur une économie circulaire à échelle locale et régionale et soutient l'émergence de modèles de résilience urbaine en développant une habitation, une production et une consommation collaboratives.

Les premières unités de R-Urban ont été implantées à Colombes, près de Paris et à Hackney Wick, à Londres. La Charte R-Urban et la Foncière Coopérative soutiennent le développement du réseau R-Urban en France et à l'étranger. Grâce à une gouvernance participative, portée par les usagers des différentes unités, le projet R-Urban propose une alternative plus solidaire au renouvellement de la ville d'aujourd'hui. Exposé à la COP 21 et à la Biennale d'Architecture de Venise, le projet R-Urban contribue à l'émergence d'un mouvement de résilience citoyenne collaborative, porté par d'autres nombreux collectifs en Europe.

R-Urban is a participative strategy of urban resilience. The project proposes the setting up of local networks and closed ecological, social and economic circuits through a series of resident-run civic hubs hosting productive practices: recycling and re-using, local energy production, eco-build, urban agriculture, co-housing, green transportation. The project activates local and regional circular economy and supports the emergence of more collaborative resilient models of living, producing and consuming in the city.

The first hubs have been implemented in Colombes, near Paris and in Hackney Wick, in London. Through participatory governance, driven by the hubs stakeholders, R-Urban offers a more inclusive alternative to the contemporary city regeneration. The R-Urban Charter and the Cooperative Development Trust provide tools for developing the network across other cities and regions. Exposed at the COP21 and the Venice Architectural Biennale, the R-Urban project contributes together with other numerous collective practices to the emergence of a collaborative civic movement of urban resilience in Europe.

Une stratégie participative de résilience urbaine

A Participative Strategy of Urban Resilience

# RURBAN



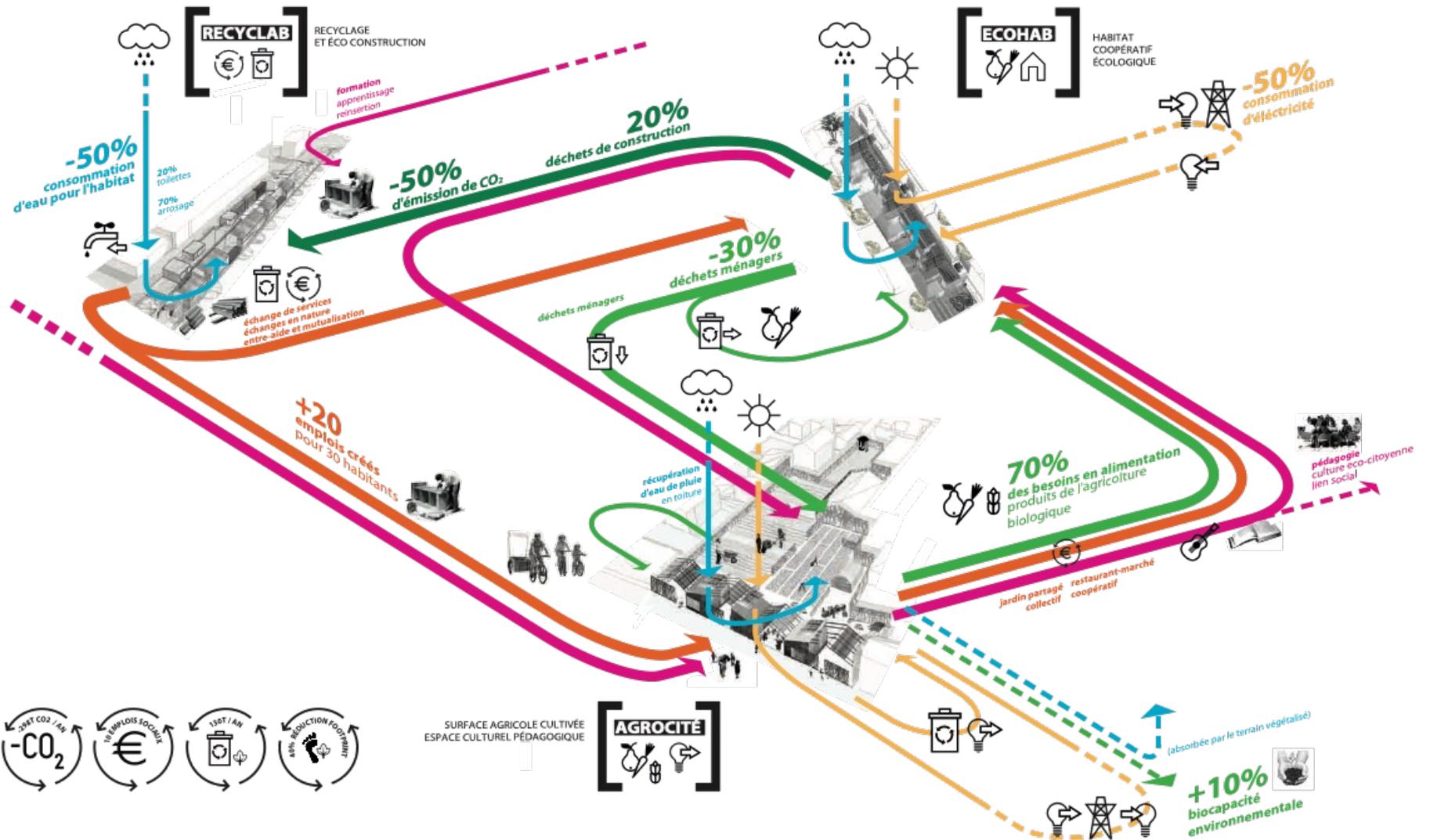
RURBAN @ ACT

# ACT

atelier d'architecture autogérée  
& public works

ISBN: 978-2-9530751-2-0

# RURBAN PILOT FACILITIES AND CYCLES



# RURBAN PILOT FACILITIES AND CYCLES

Eco-coop housing

50% less energy consumption

**RECYCLAB**  
RECYCLING AND ECO-CONSTRUCTION

**ECOHAB**  
ECOLOGICAL COOPERATIVE HOUSING

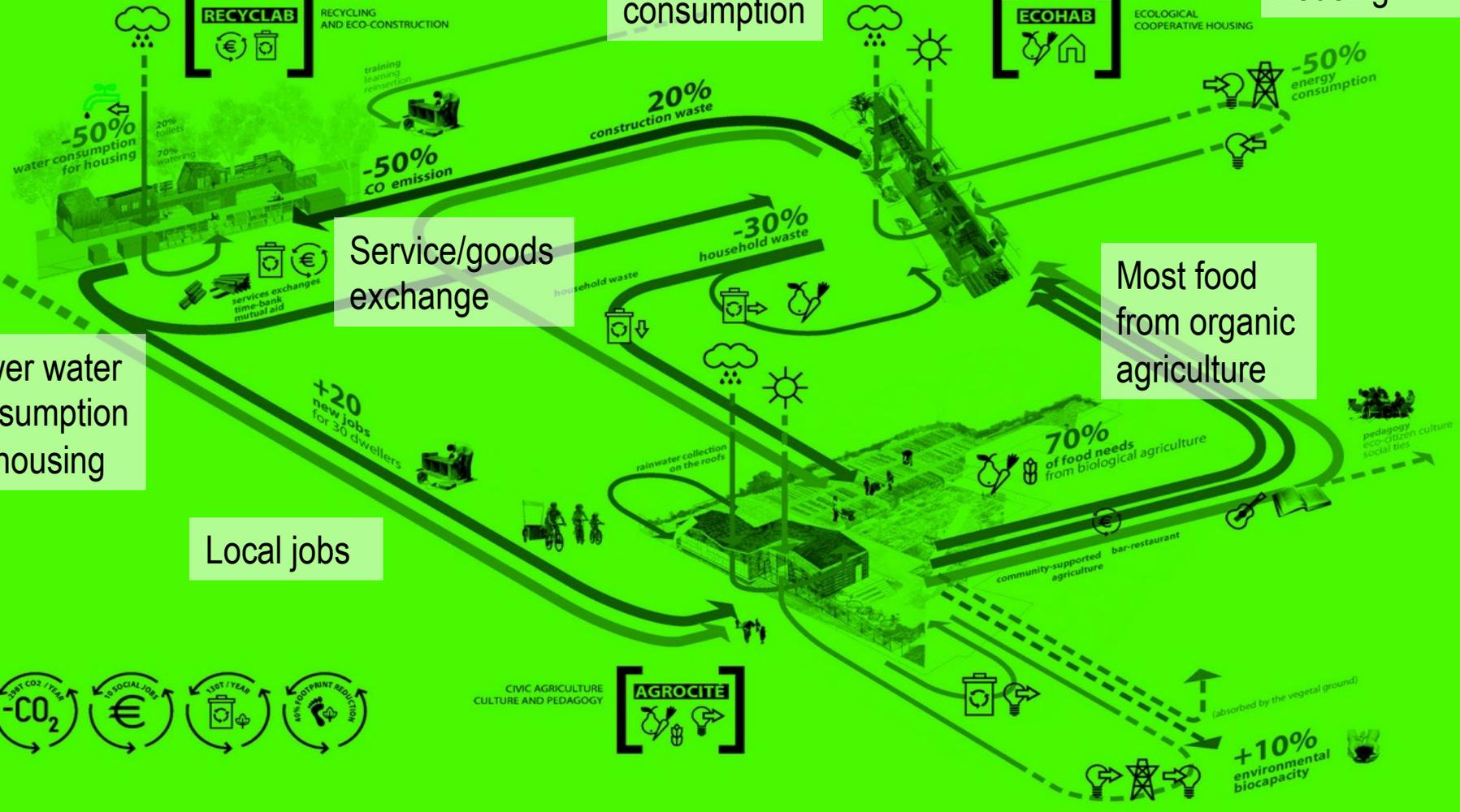
**AGROCITÉ**  
CIVIC AGRICULTURE CULTURE AND PEDAGOGY

Lower water consumption for housing

Service/goods exchange

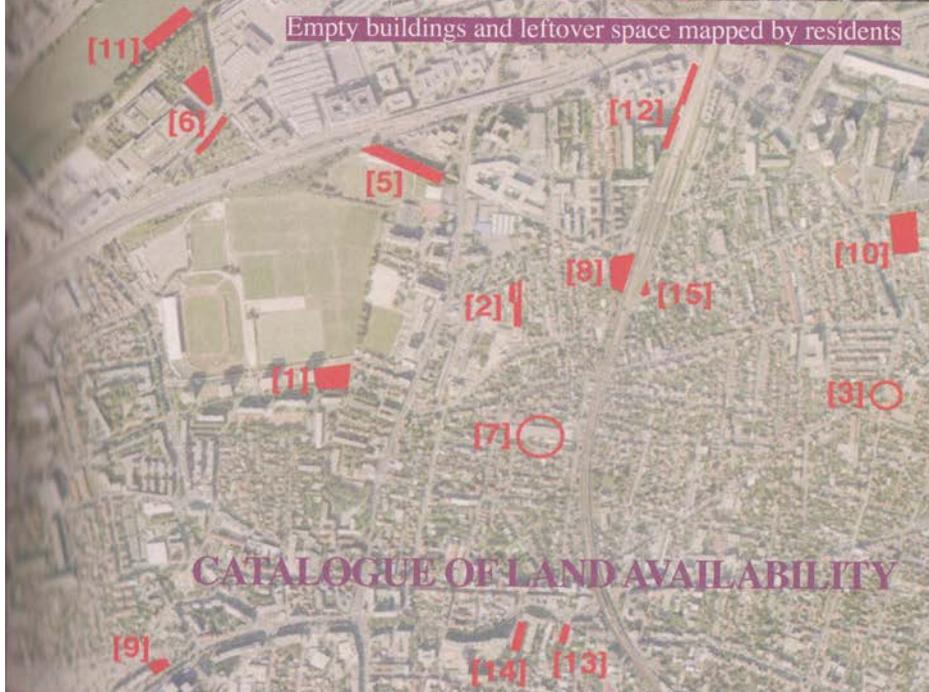
Most food from organic agriculture

Local jobs

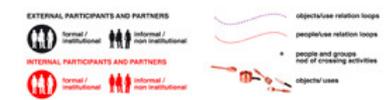
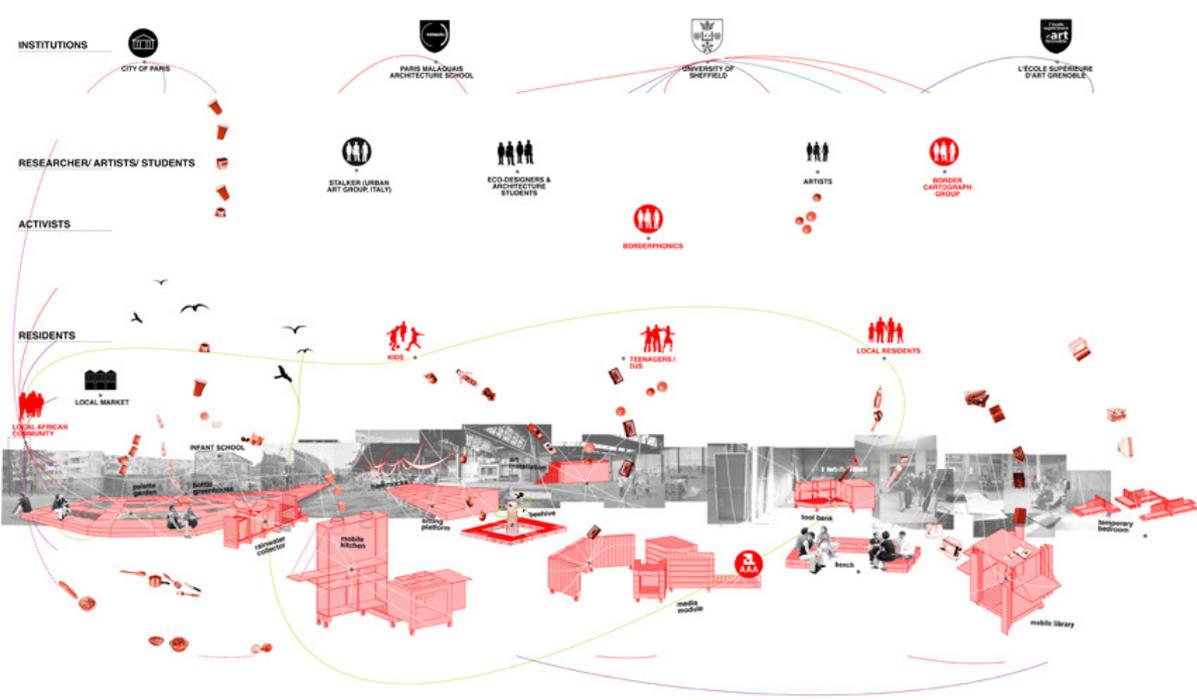
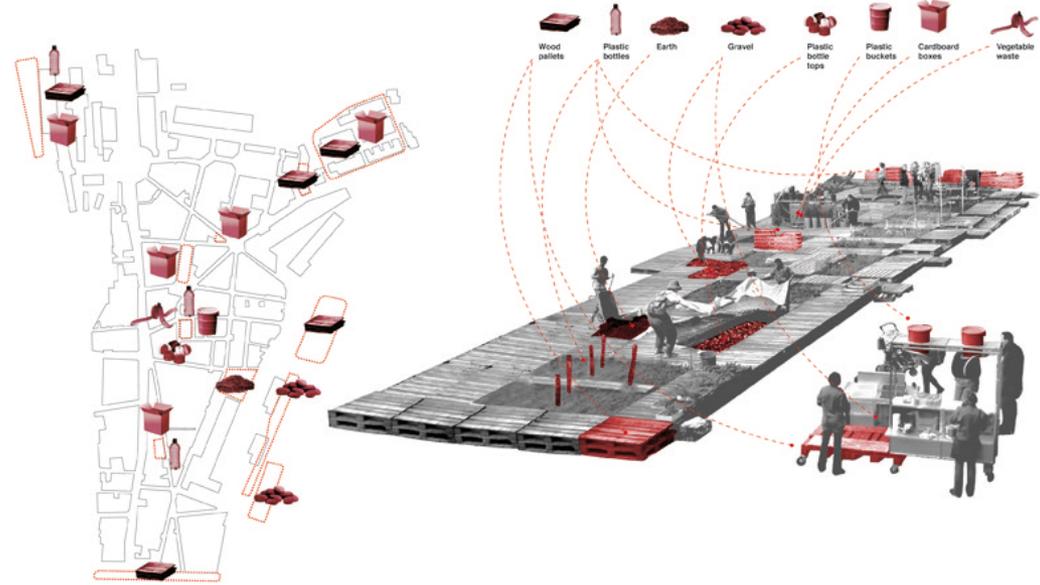




Empty buildings and leftover space mapped by residents



CATALOGUE OF LAND AVAILABILITY







## Passage 56, rue St Blaise



**Agrocité – Gennevilliers** | R-Ur. <http://www.urbantactics.org/projets/agrocite-gennevilliers/>  
Atelier d'architecture autogérée [studio for self managed architecture]



### III. A framework of approaches

1. Spatial design
2. Systems design
3. Productive infrastructure

# 1. Spatial design -- (re)localizing



Alice Waters, the celebrity chef and an early advocate of local ingredients, at a farmers' market in January. She and other food activists see the White House as an ally in Washington.

New York Times

# Community gardens in Prague, Czech Republic

- Growing neighborhood relationships in anonymous city through gardening and culture (beer, movies, music, art, workshops, theater, kids activities)



bar with tap beer in a trailer

Prazelenina, the oldest community garden in CZ (3 years old)

Slide courtesy of Jan Richtř



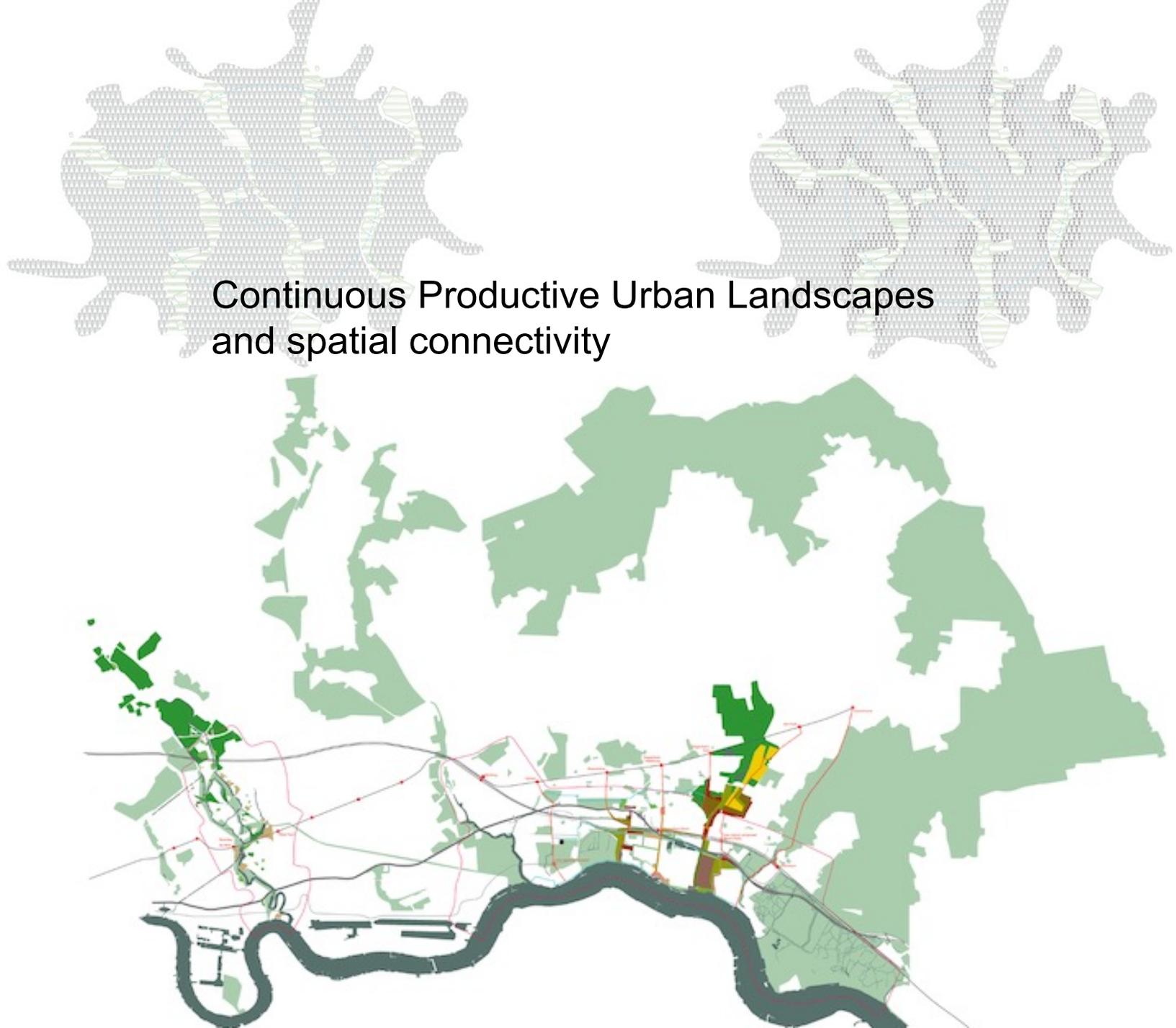
Brooklyn Grange, NY

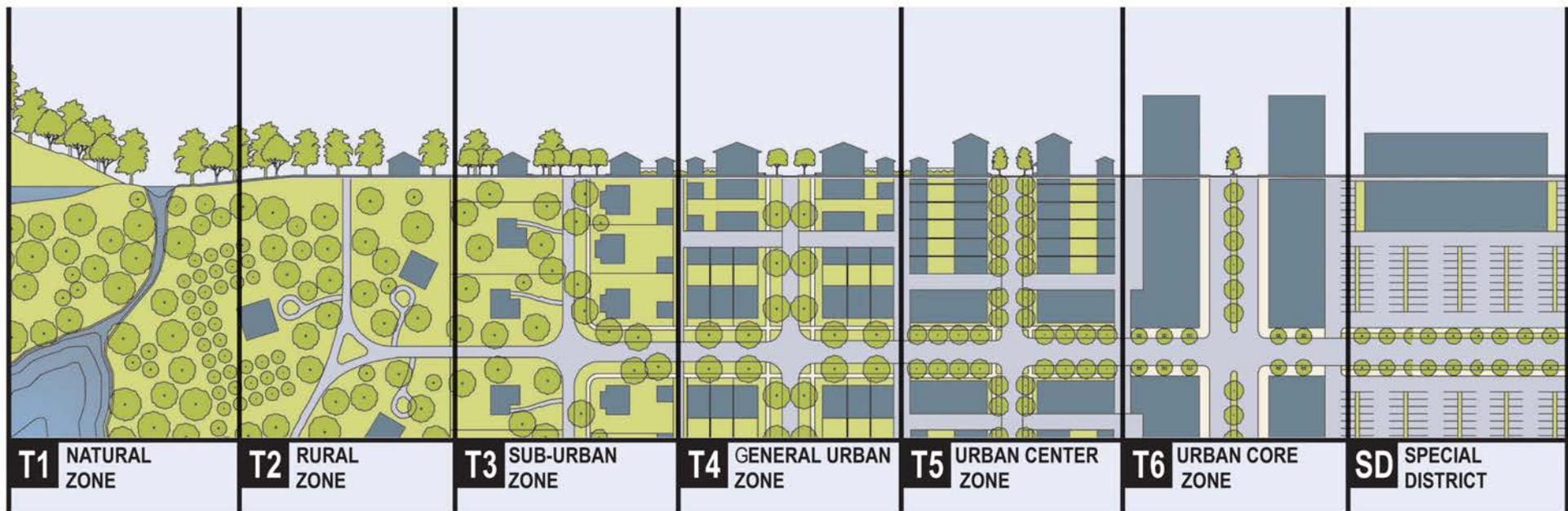
Alec Baxt



Lafayette Greens, Detroit

Continuous Productive Urban Landscapes  
and spatial connectivity

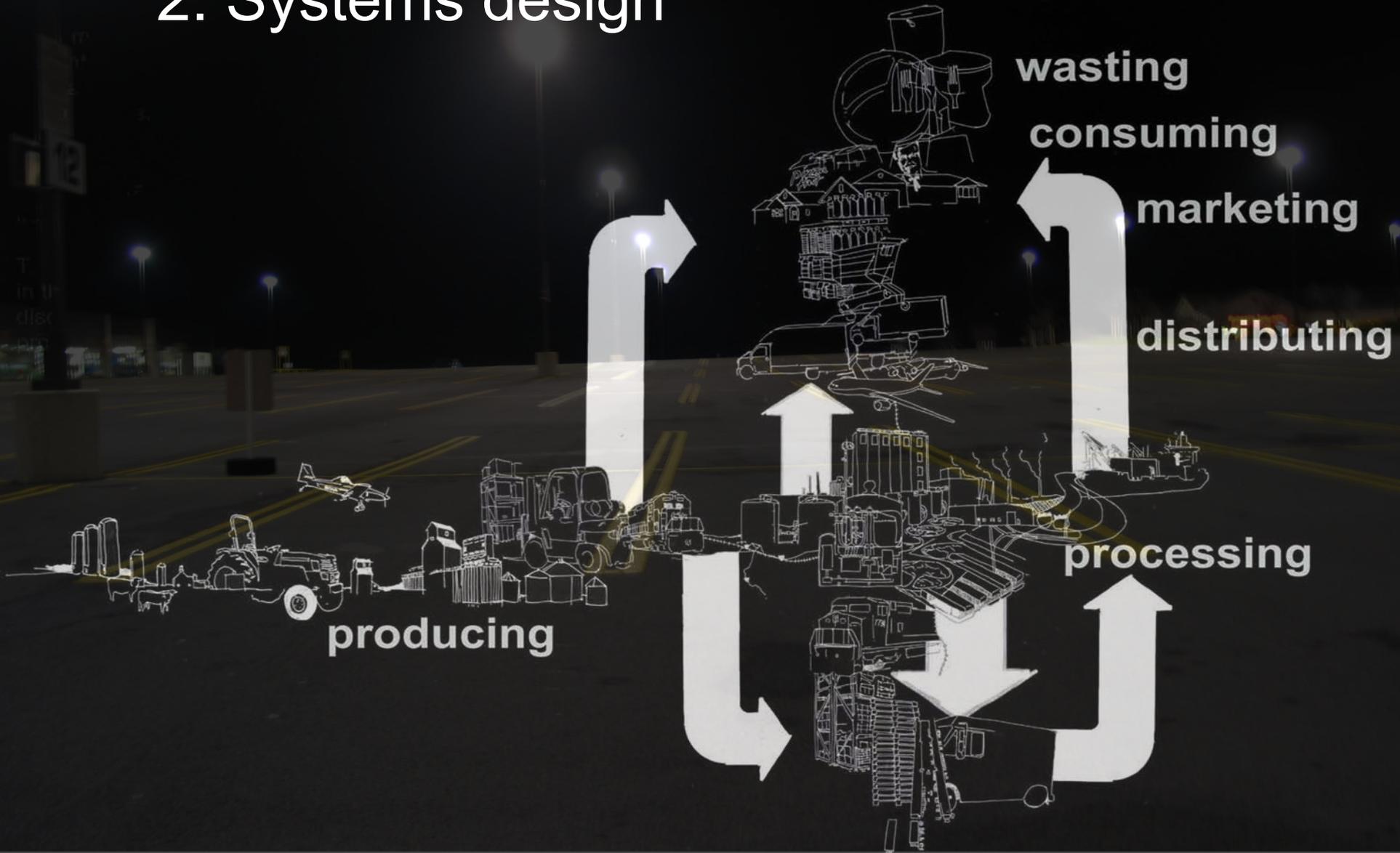




Agrarian Urbanism encoding an (historical image) urban gradient



## 2. Systems design



# Food systems and landscape systems

Embedded in other systems:

Transportation

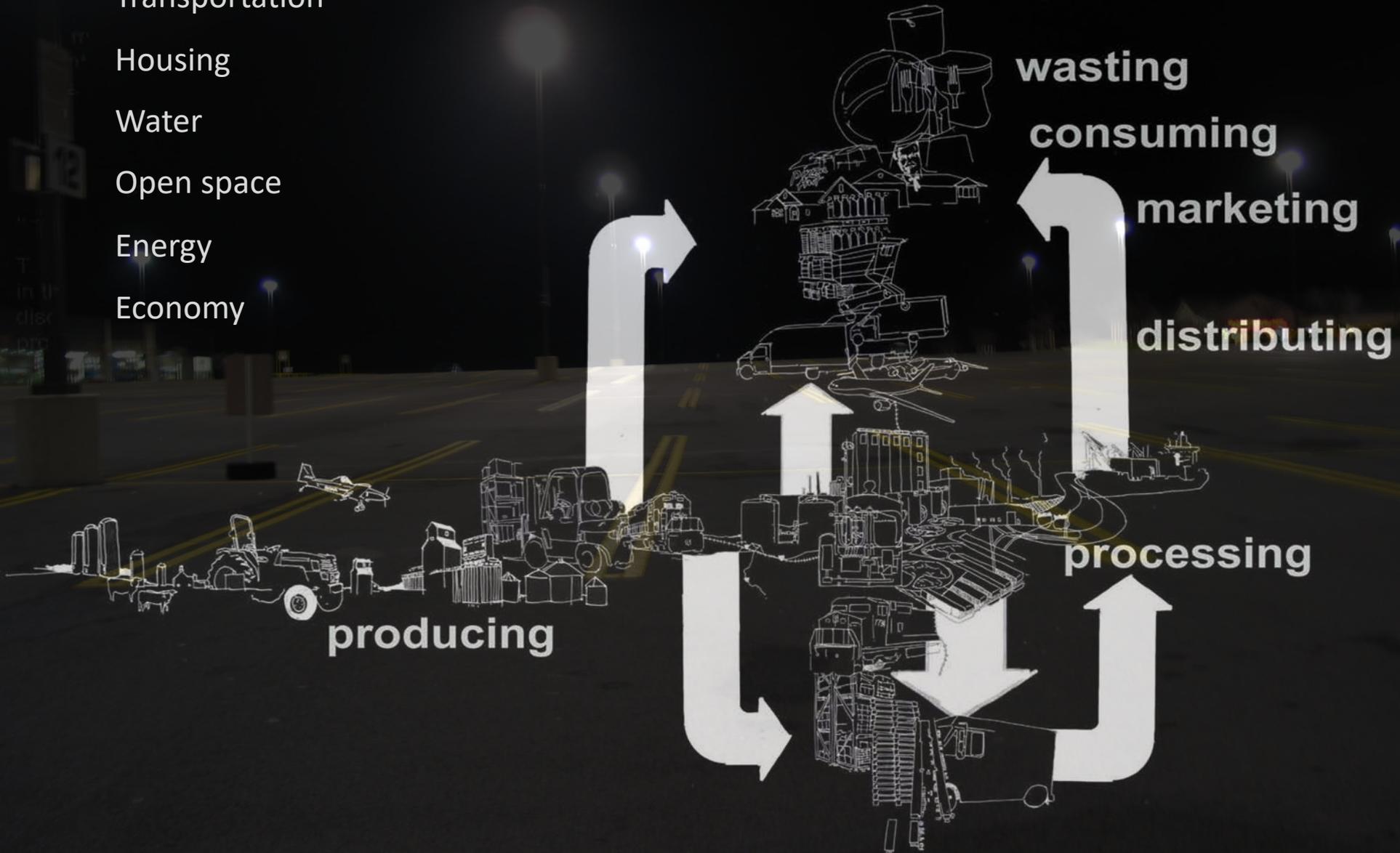
Housing

Water

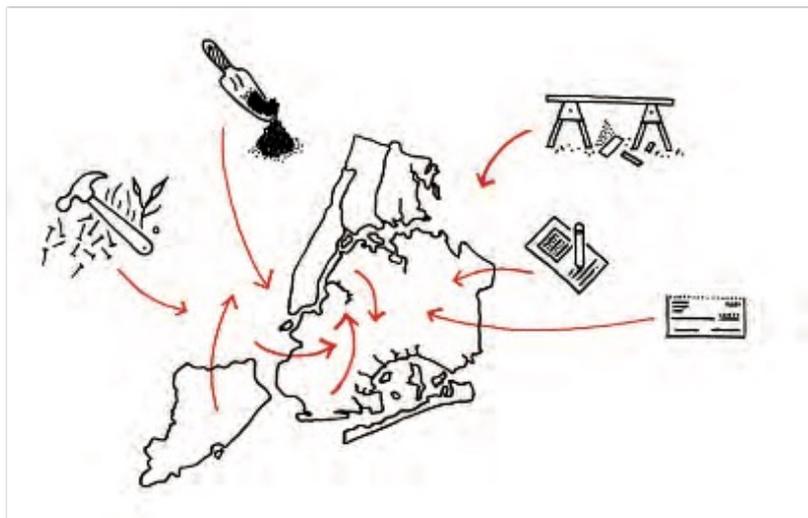
Open space

Energy

Economy



Zoom out again to the scale of the city, and urban agriculture appears as a complex system, with thousands of raised beds in hundreds of schoolyards and community gardens, on rooftops and public housing land. Scores of community-based organizations, government agencies, and philanthropies contribute soil, lumber, and funding, and run horticultural training and nutrition classes. Upstate and Long Island farmers and suppliers bring food and seeds, connecting city residents to the surrounding region. Underlying all of this activity are the invisible laws, regulations, and policies that influence where new farms and gardens locate and what activities are encouraged or prohibited.



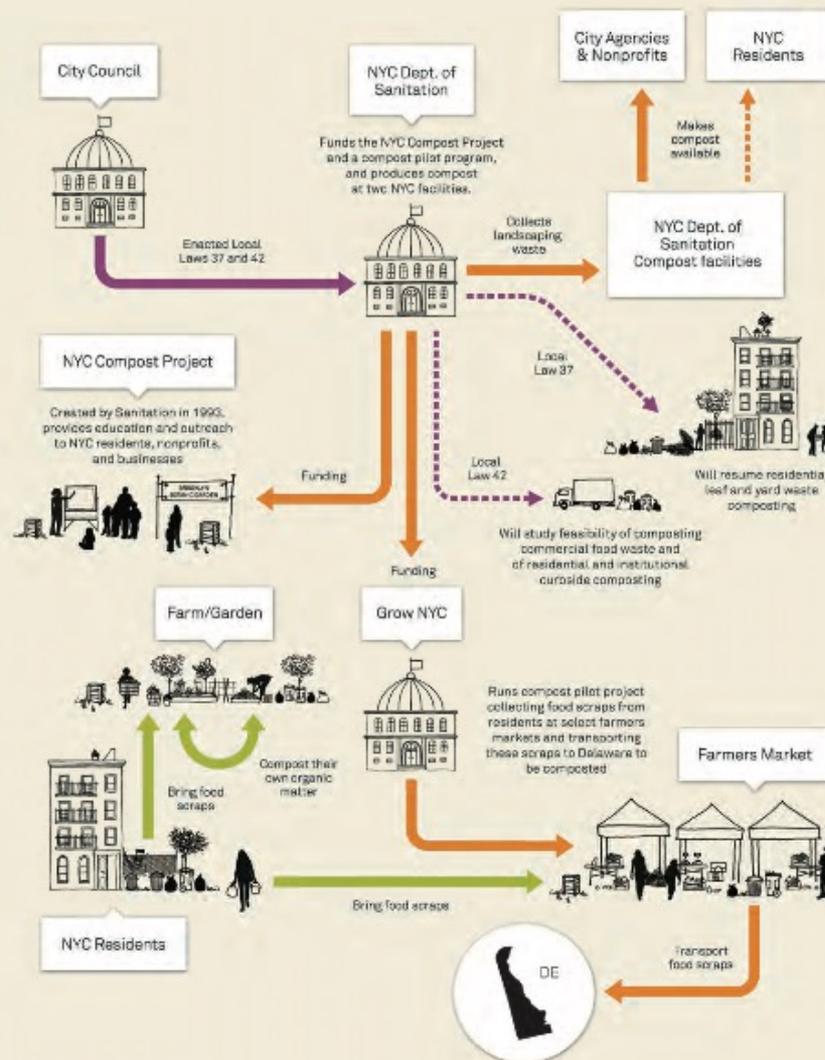
In order to recommend lasting and meaningful improvements to the urban agriculture system, and to produce tools that will be useful to its diverse spectrum of actors, the first step is to understand how it functions. This section provides a brief overview of the city's urban agriculture system, including:

- Goals cited by farmers and gardeners, and the activities and programs they offer to meet those goals
- Defining characteristics of four main types of urban agriculture operations in New York City: institutional farms and gardens, commercial farms, community gardens, and community farms
- Resources the city's farmers and gardeners need to operate, and the challenges they face in obtaining those resources
- Roles of three other key urban agriculture stakeholder groups in New York City: support organizations, government officials, and funders

## COMPOST IN NYC

Compost is produced and distributed in many ways in New York City. The Department of Sanitation sponsors numerous compost-related programs, and scores of community gardens compost food scraps from local residents.

Due to budget cuts in 2008, Sanitation discontinued its popular Compost Giveback program, which provided free compost to NYC residents.



# networked urban agriculture



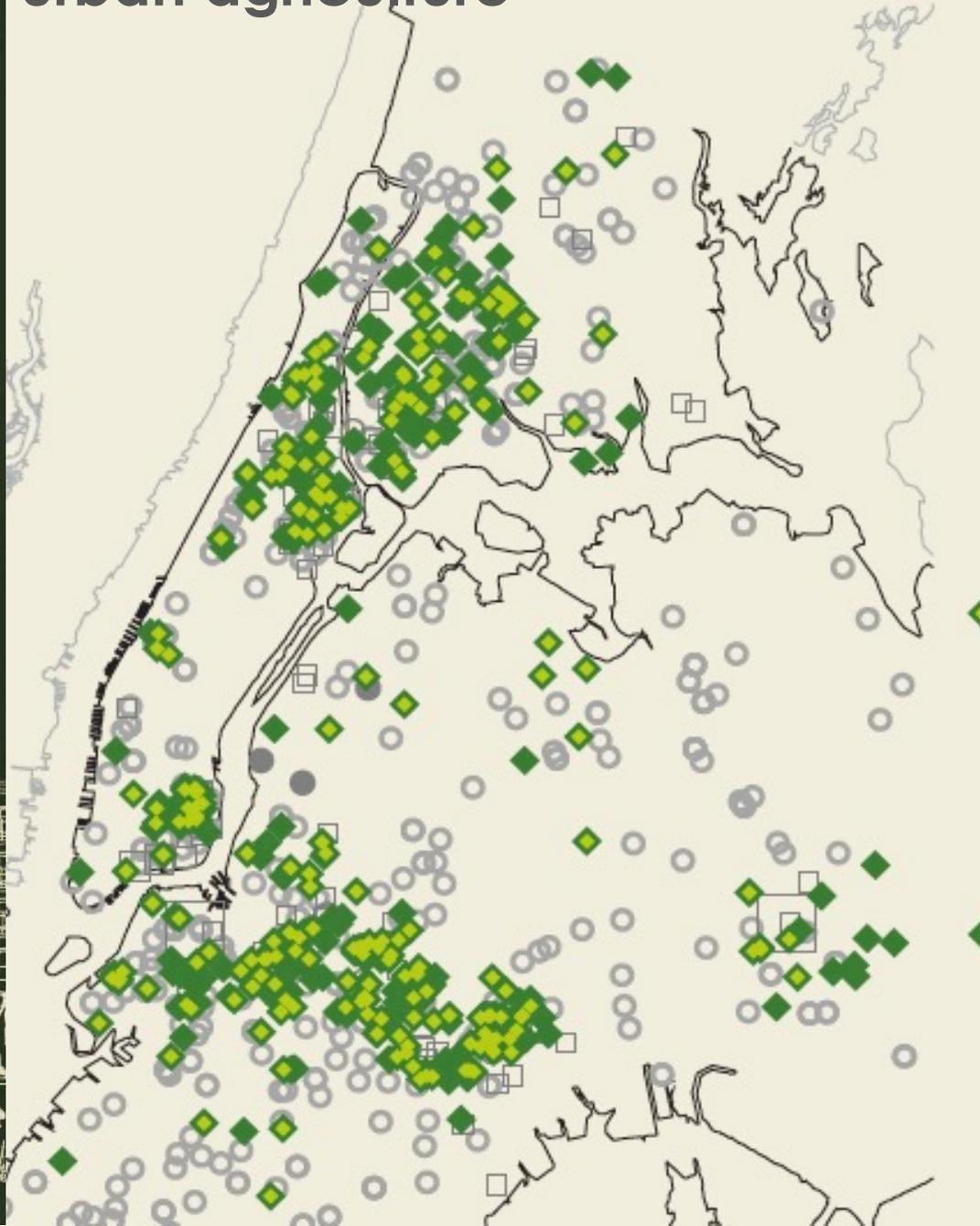
## FIVE BOROUGH FARM II

Growing the Benefits of Urban Agriculture in New York City



A project of the  
**DESIGN TRUST  
FOR PUBLIC SPACE**

in partnership with

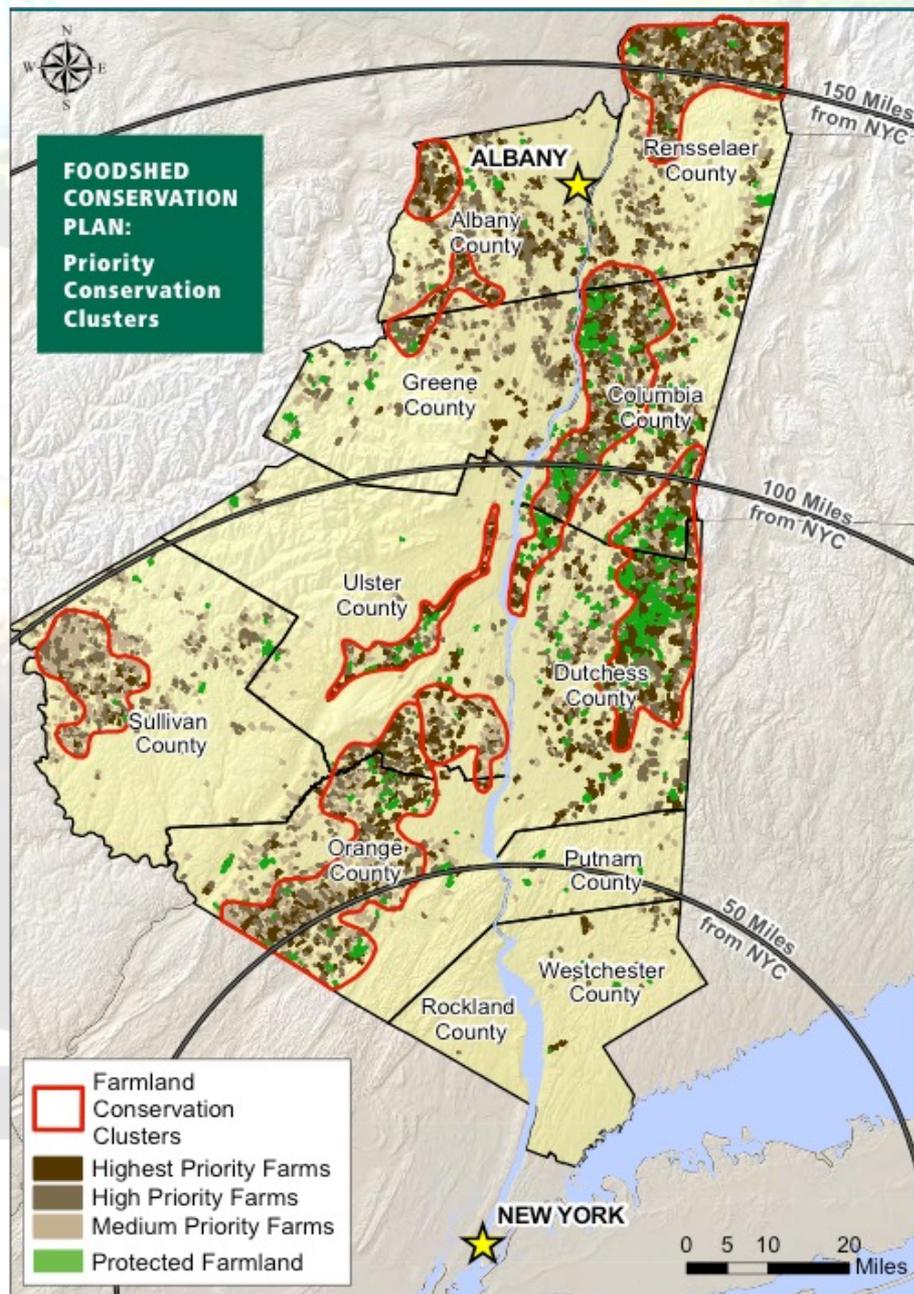
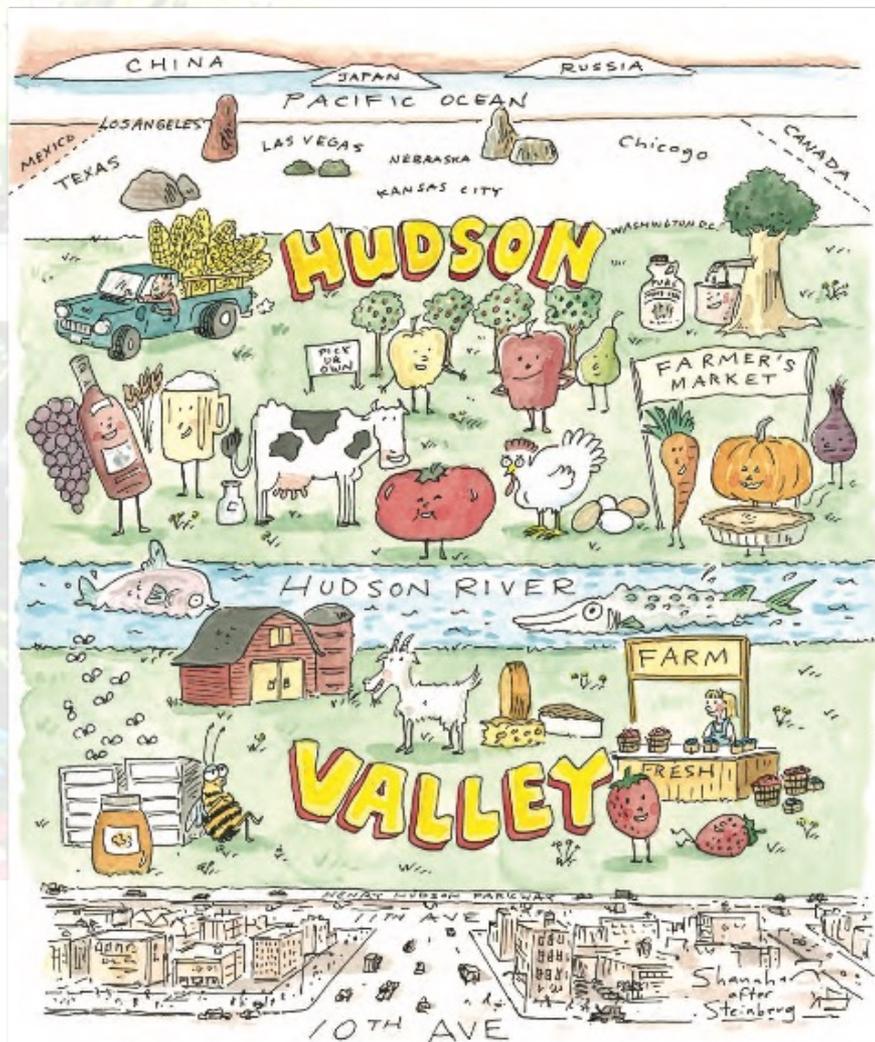




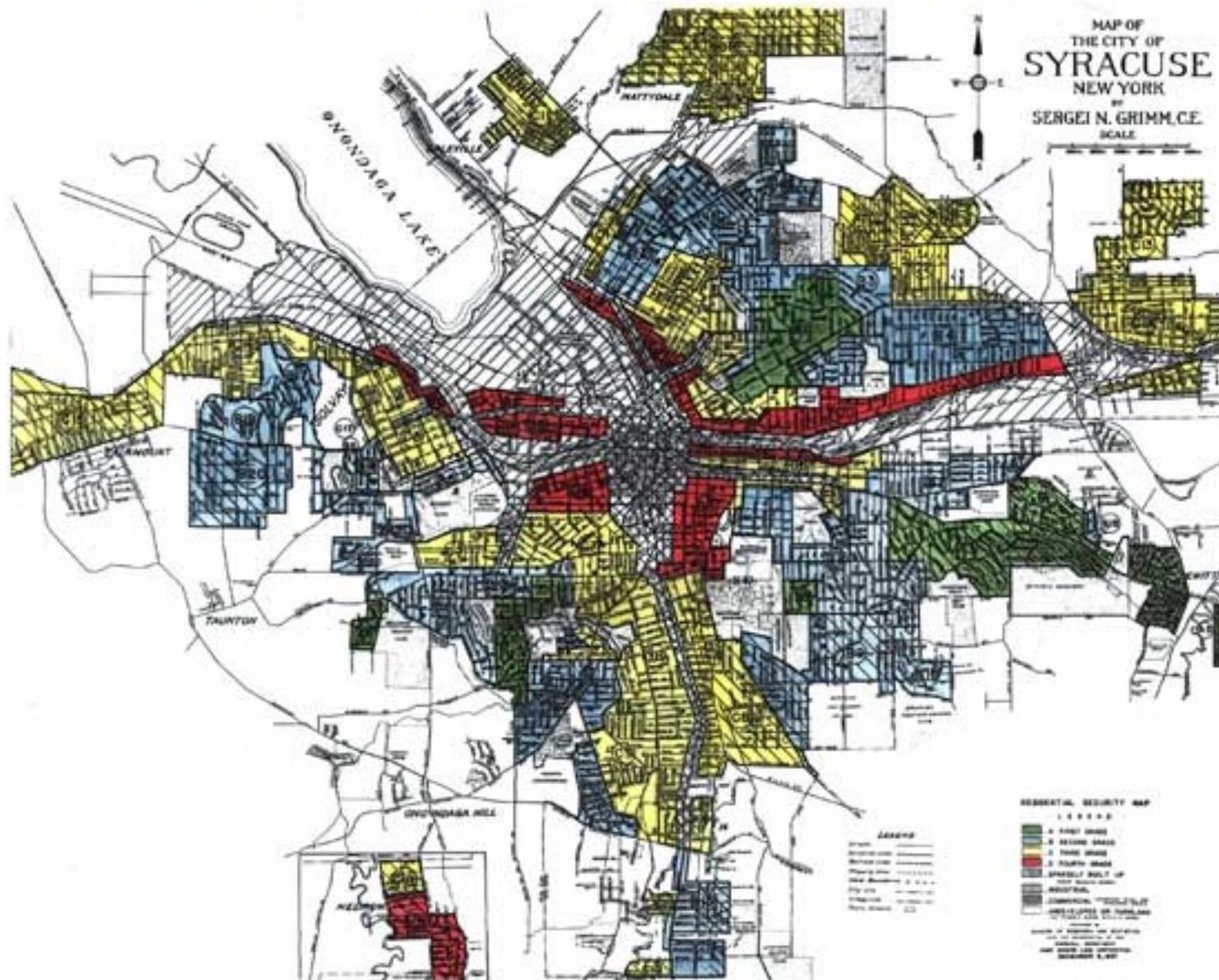
Greenmarket Union Square, NYC

# SECURING FRESH, LOCAL FOOD FOR NEW YORK CITY AND THE HUDSON VALLEY

## A Foodshed Conservation Plan for the Region

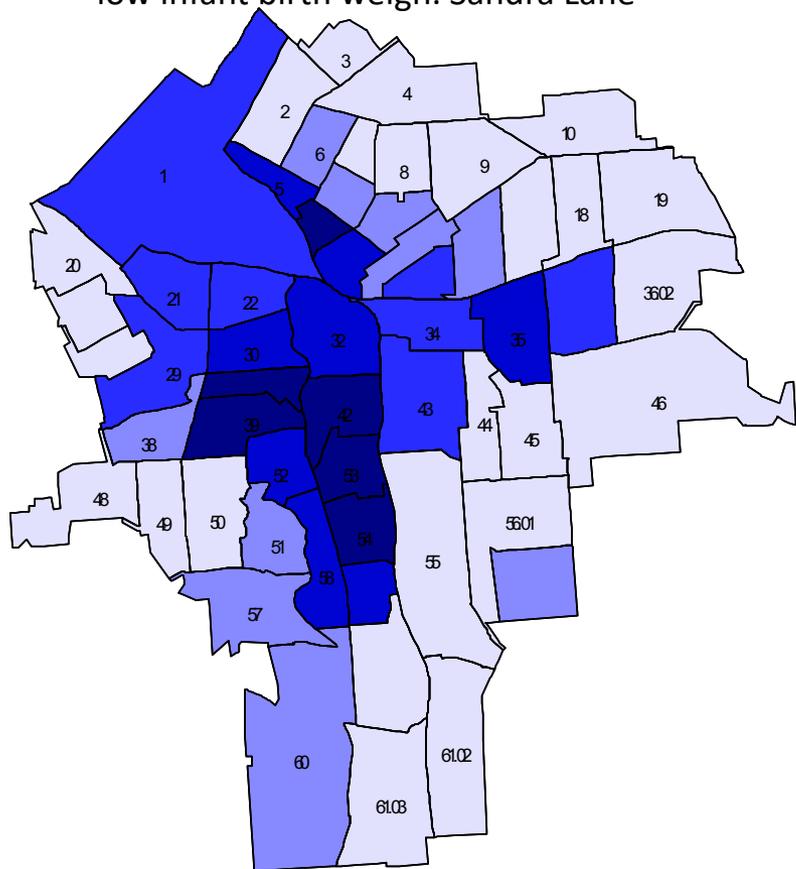


# Home Owners Loan Corporation Red-Line Map of Syracuse and Vicinity



Sergei Grimm, 1937 HOME OWNERS LOAN CORPORATION RED-LINE MAP OF SYRACUSE AND VICINITY (1937). Courtesy of Emanuel J. Carter, State University of New York, College of Environmental Science and Forestry.

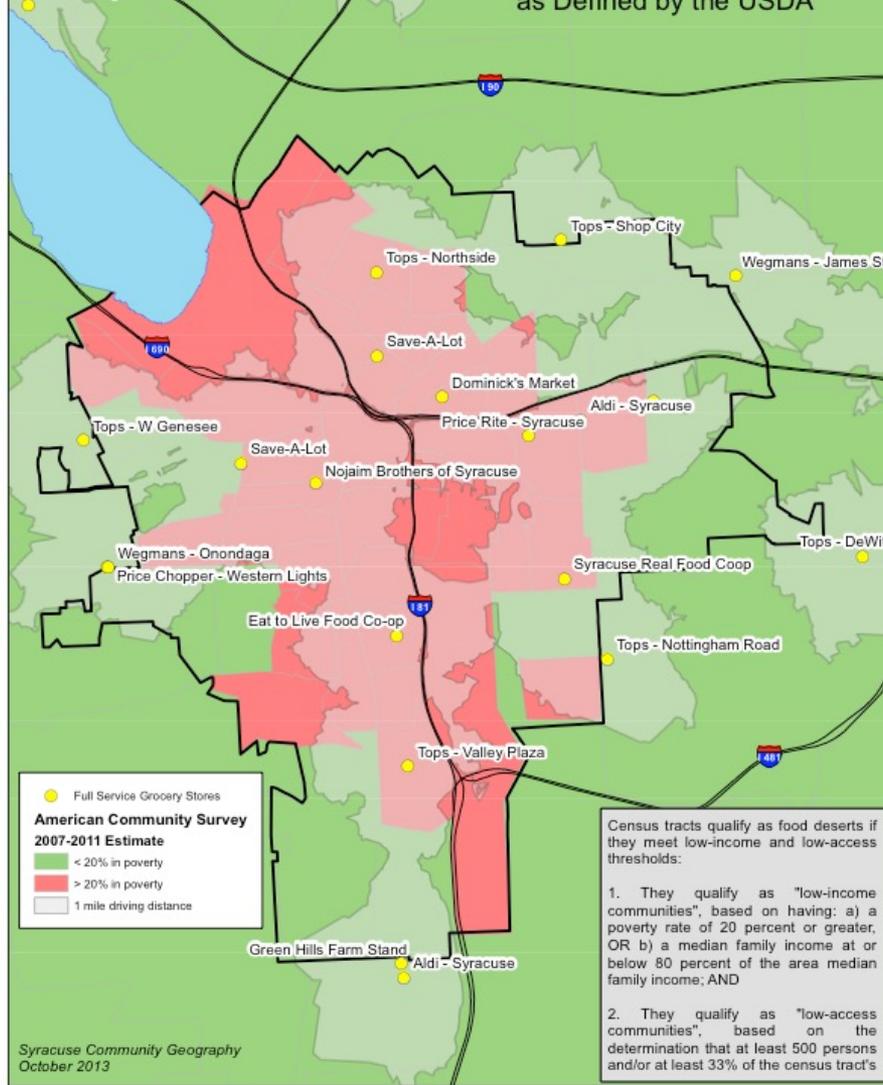
Structural violence: food deserts, corner stores and low infant birth weigh. Sandra Lane



Census Tracts Ranked by Aggregate Scores for Ecologic / Contextual Risks for Poor Birth Outcomes, Syracuse, NY, 2001 - 2002

Food system and Public health

Source: Sandra Lane. Syracuse University



Full Service Grocery Stores  
American Community Survey 2007-2011 Estimate  
 < 20% in poverty  
 > 20% in poverty  
 1 mile driving distance

Census tracts qualify as food deserts if they meet low-income and low-access thresholds:

1. They qualify as "low-income communities", based on having: a) a poverty rate of 20 percent or greater, OR b) a median family income at or below 80 percent of the area median family income; AND
2. They qualify as "low-access communities", based on the determination that at least 500 persons and/or at least 33% of the census tract's

Syracuse Community Geography  
October 2013

Food deserts

Source: Syracuse Community Geography

# CITYFOOD NETWORK



City Region Food Systems

# 3. Productive infrastructure

Linking urban agriculture sites to form coherent urban spatial and ecological infrastructures  
Providing ecological services



Mill Creek Farm, Philadelphia  
Community garden and entrepreneurial farm  
Land leased from Philadelphia Water Department

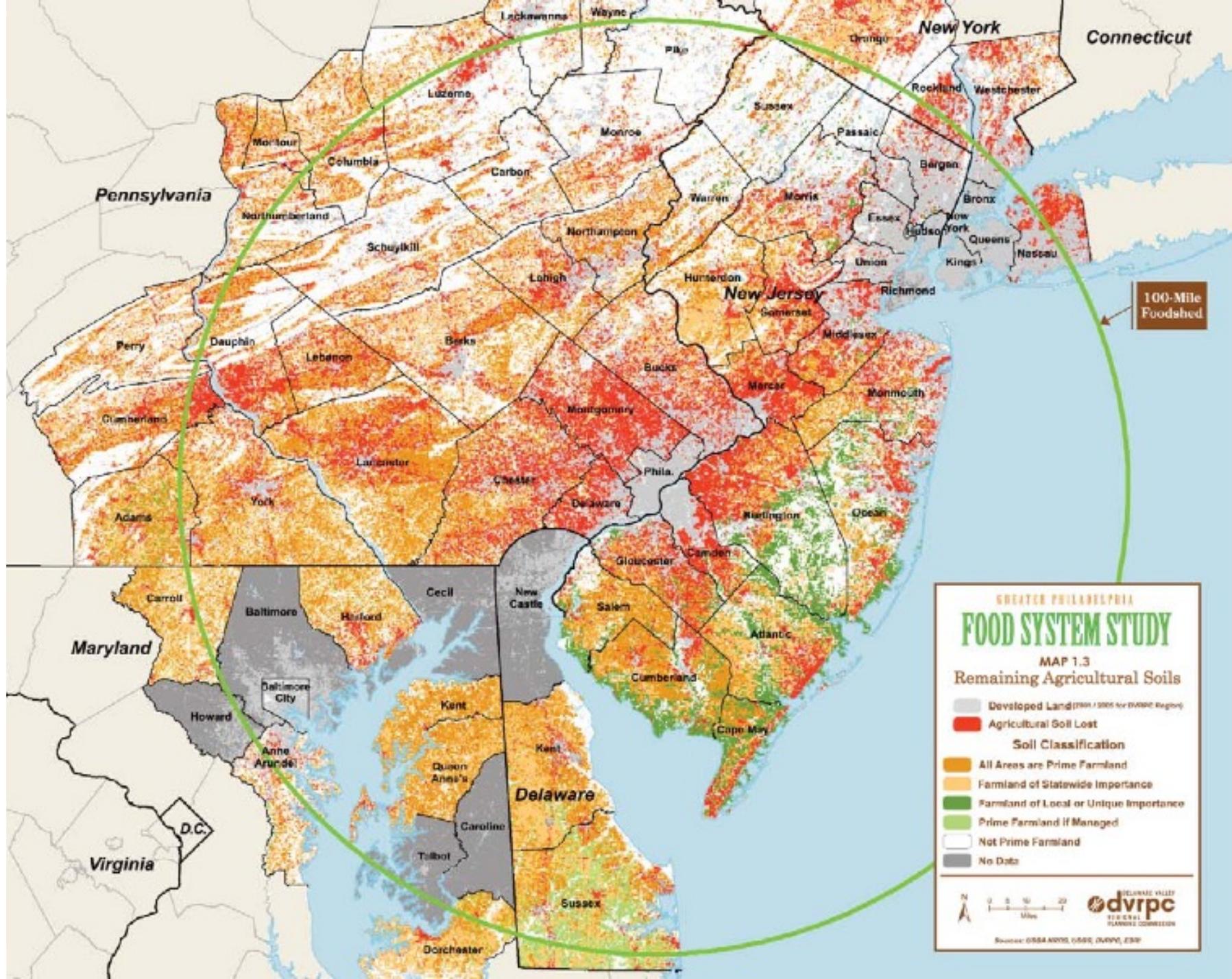
*January 2010*



**GREATER PHILADELPHIA**

# **FOOD SYSTEM STUDY**





GREATER PHILADELPHIA  
**FOOD SYSTEM STUDY**  
MAP 1.3  
Remaining Agricultural Soils

- Developed Land (1991-2005 for DARC Region)
- Agricultural Soil Lost

Soil Classification

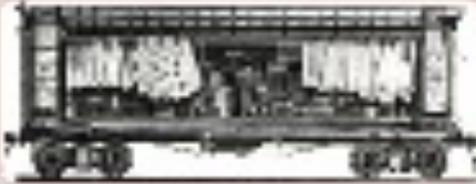
- All Areas are Prime Farmland
- Farmland of Statewide Importance
- Farmland of Local or Unique Importance
- Prime Farmland if Managed
- Not Prime Farmland
- No Data

Source: USDA, NRI, 2002; USGS, DWRP, ESRI

dvrc  
REGIONAL DEVELOPMENT  
PLANNING COMMISSION



● Rise of the Refrigerator Car (1890 ==>)  
Complete Change in Food Distribution

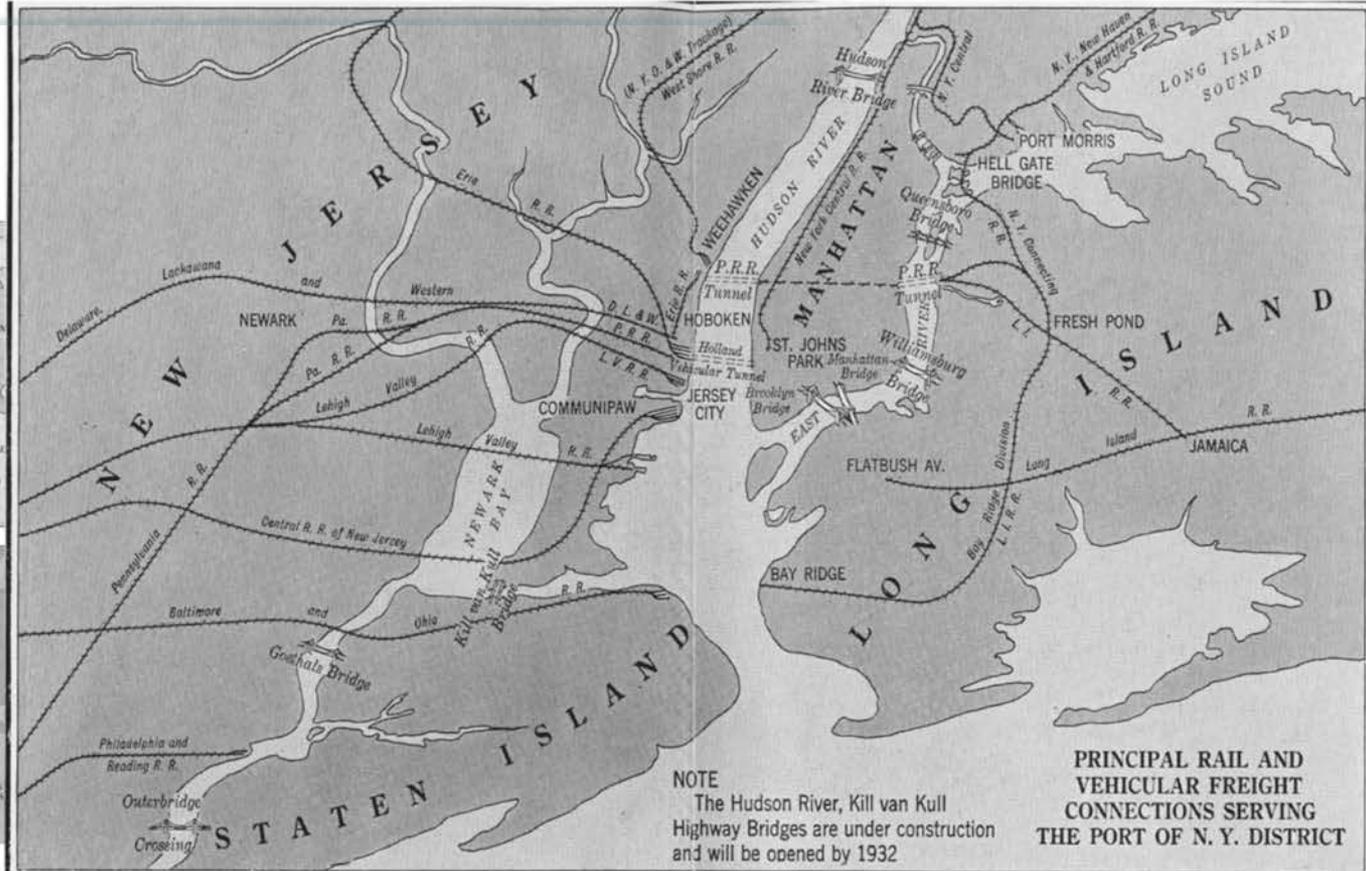


http://www.norfolk.com/transportation/transportation/RefrigeratorCar

-A refrigerator car (or "reefer") is a refrigerated boxcar, a piece of railroad rolling stock designed to carry perishable freight at specific temperatures

## HEDDEN FOODSHED

Hedden's foodshed came about because of the threat of a train strike, so naturally the maps derived are transportation based delineating how food gets from its source to the consumer.



# Regionalizing the Food System

## New York City Regional Foodshed: Transportation



- Greenmarket farms
- Weighted delivery route
- Developed (urbanized)
- Cropland
- Pastureland

Much of the food comes into NYC by truck, but also rail, air, and ship, and we're currently analyzing the data on truck flows into the city, to see if there are existing nodes of transportation infrastructure that could be adapted to support a more regional system.

Source: GrowNYC Greenmarket Program..

Image: Urban Design Lab

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Source: GrowNYC Greenmarket Program..

Image: Urban Design Lab

**Concluding thoughts**



# Challenges

- How do food systems work at different **scales** and how can improvements in these systems be made across the multiple scales of urban territories?
- How can the **capacity** of various actors working on productive spaces be strengthened?
- How can the **flows** of labor, energy and other resources be managed for effective urban food systems?
- How can the **implementation** of such visions occur in the context of the dominant neo-liberal economy?



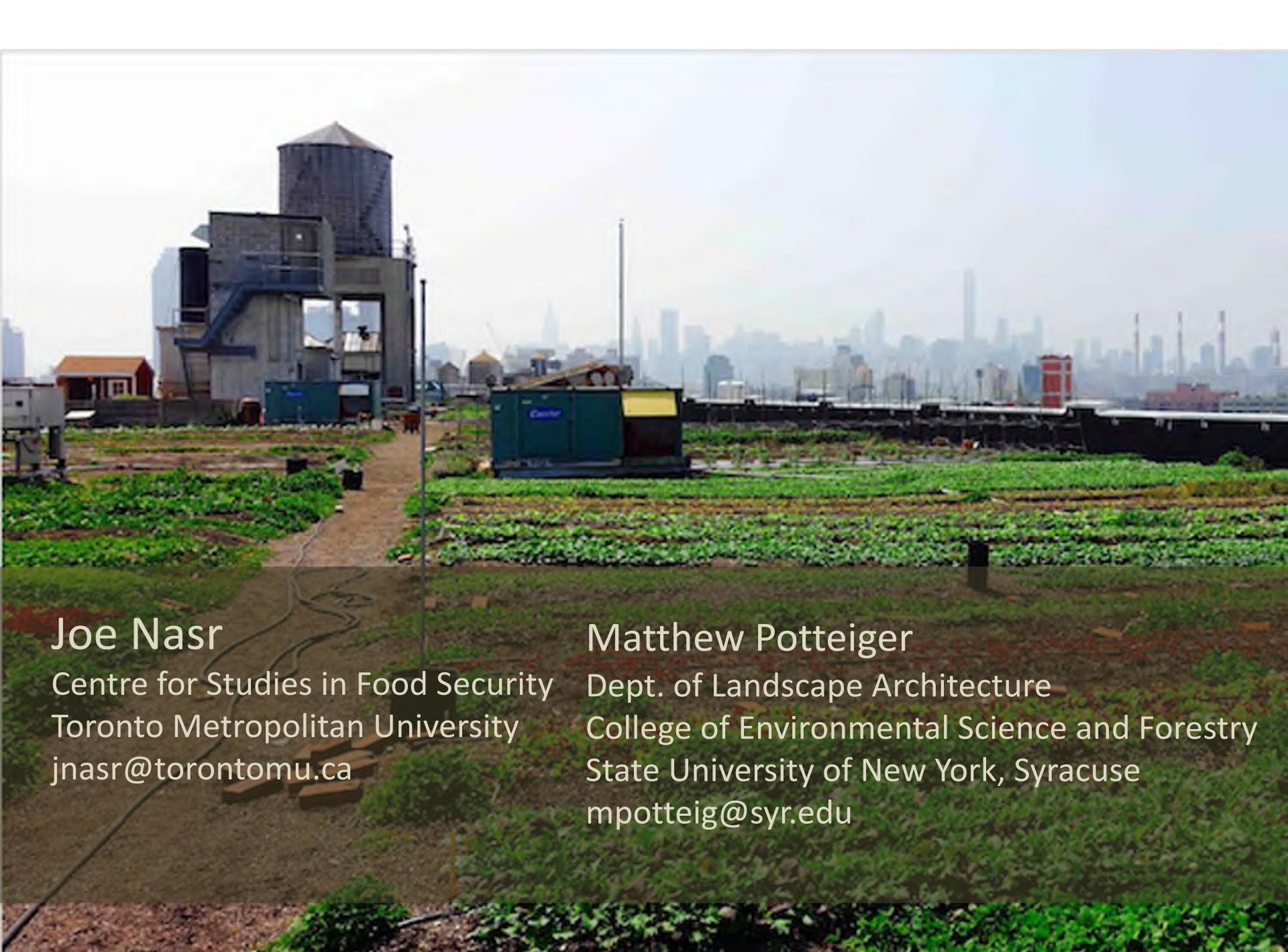
**Concluding thoughts**

# Challenges

- How can the growing recognition of the necessity and urgency of addressing such vital problems be translated into concrete **actions** that place the urban environment at the center of solutions to food system problems?
- How can actionable spatial, systemic, and infrastructural responses to urban food problems be conceived and realized within the context of **structural inertia** that confronts attempts at addressing complex problems related to cities as well as food and agriculture?
- What are the implications of the emergent practices and actors working in productive urban landscapes for **social relationships and justice**?



**Concluding thoughts**



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# Challenges

1. Food systems work at different scales (from global to local). Could you mention examples of improvements in these systems made across the multiple scales of urban territories?
2. How can the capacity of actors working on productive spaces be strengthened?
3. Which changes in the flows of labor, energy, and other resources could contribute to more effective urban food systems?
4. Could you give 2 examples of change in governance to counter the dominant neo-liberal economy?

# Opportunities

5. Could you think of two concrete actions that place the urban environment at the center of solutions to food system problems?
6. What actionable spatial, systemic, and infrastructural responses to urban food problems (*within the context of structural administrative inertia in addressing food and agriculture issues*)?
7. What implications of the emergent practices and actors working in productive urban landscapes for social relationships and justice?

# PHASE II

## Analysing the food system

### Session 4-6

# AESOP4food Online Seminar 2023



## COURSE SCHEDULE

March 2<sup>nd</sup> – June 1st, 2023

Thursday / 17:00 to 18:30 CET



Mainly for students from partners Universities

## INTENSIVE WORKSHOP

GHENT 9 – 18 July, 2023



# Learning objectives for PHASE II

- Understanding of **complexity of the spatial organization** of the city region food systems
- Developing skills to select the most adequate **methods and tools to be applied to map and/or analyze and evaluate** a specific situation of a **food system**.
- Designing of **sociograms / network maps** reflecting **stakeholders' connections** and **power structures** around the food system

# AGENDA 4th session on March 23, 2023



- **Introduction** Marian Simón Rojo, Universidad Politecnica de Madrid
- **Spatial participatory food (systems) mapping** Katrin Bohn, Bohn&Viljoen Architects, School of Architecture & Design, University of Brighton
- Q&A
- *Next session* + compulsory reading

# Compulsory reading

- Compulsory reading:
  - FAO Report : "**Integrating food into urban planning**" page 264 – 275 (Food asset mapping in Toronto and Greater Golden Horseshoe region, by Lauren Baker).
- Recommended reading:
  - [Planning Food System Transitions: Urban Agriculture & Regional Food Systems \(wiley.com\)](#)