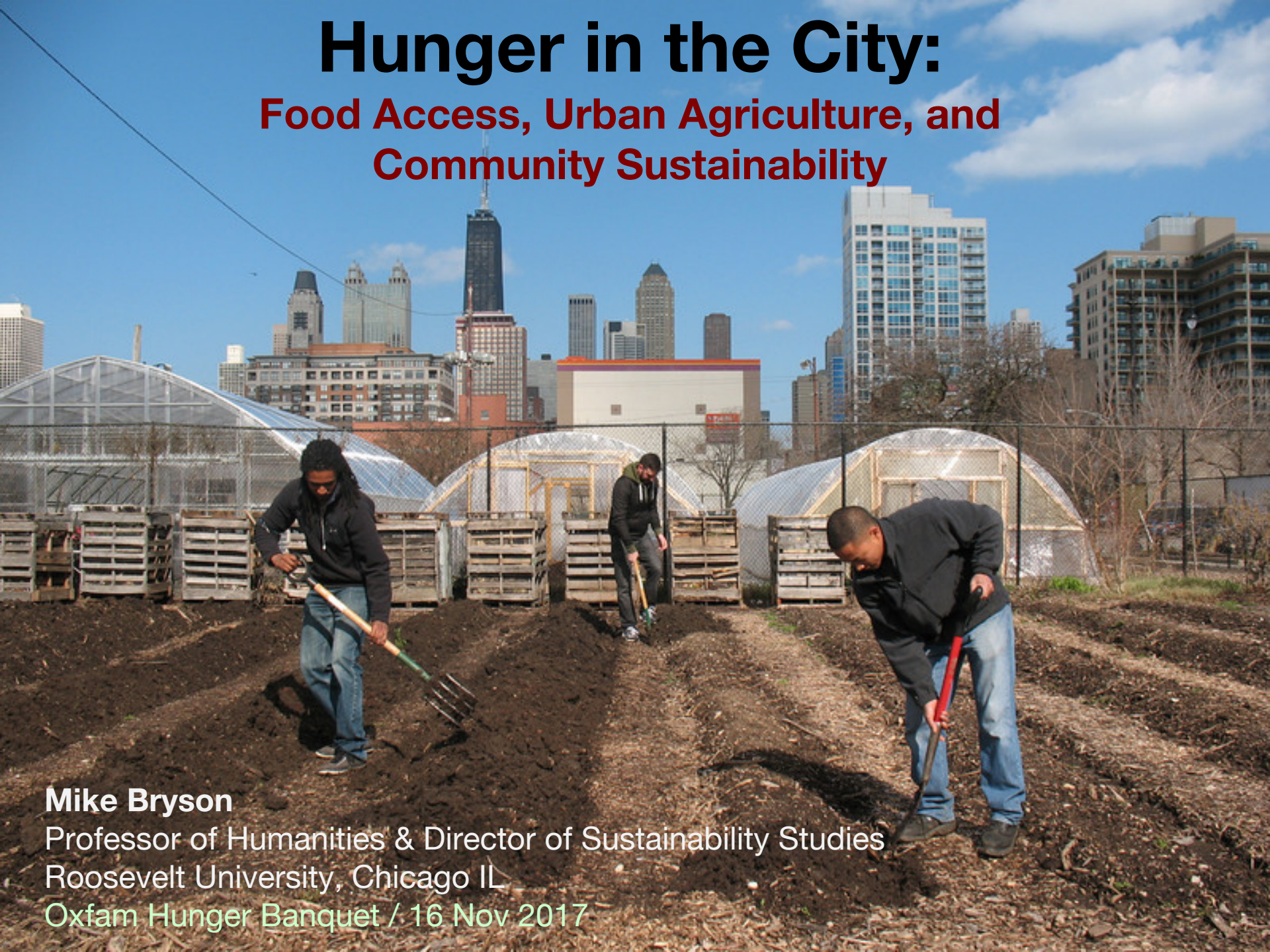
Hunger in the City:

Food Access, Urban Agriculture, and Community Sustainability



Mike Bryson
Professor of Humanities & Director of Sustainability Studies
Roosevelt University, Chicago IL
Oxfam Hunger Banquet / 16 Nov 2017

Hunger in the City:
Food Access, Urban Agriculture, and Community Sustainability

Brief Context:

Sustainability and Urbanization

Ideas for Exploration:

Hunger, food access, and food deserts

Urban agriculture and environmental justice

Growing food in the RU community

Defining Sustainability in Terms of the Future

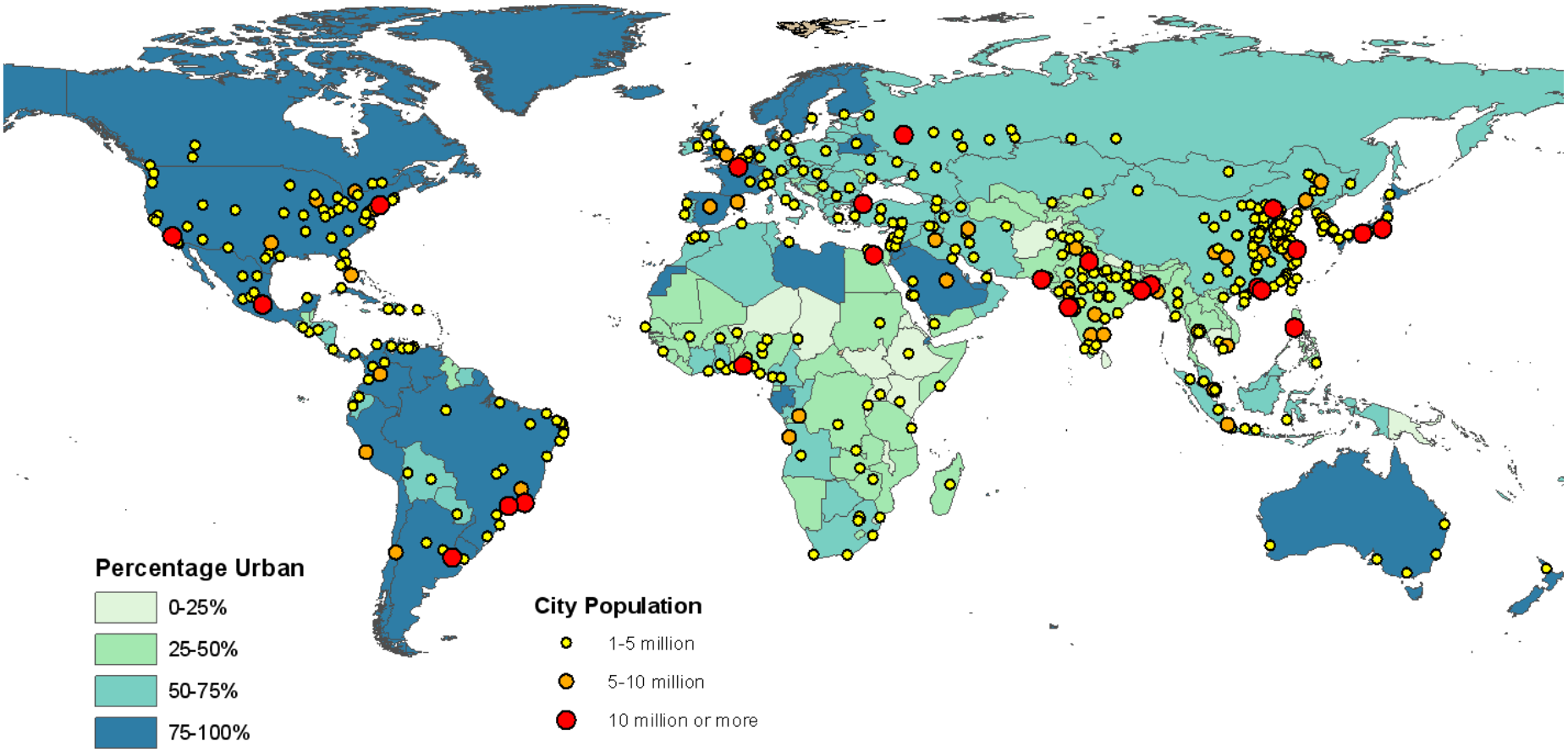
Environmental resources are conserved for both future human generations as well as non-human biota.

Economic development occurs not at the expense of the natural environment, but in a way to mitigate ecological costs and impacts.

Equity – social, economic, and environmental justice – governs the process of sustainable development.

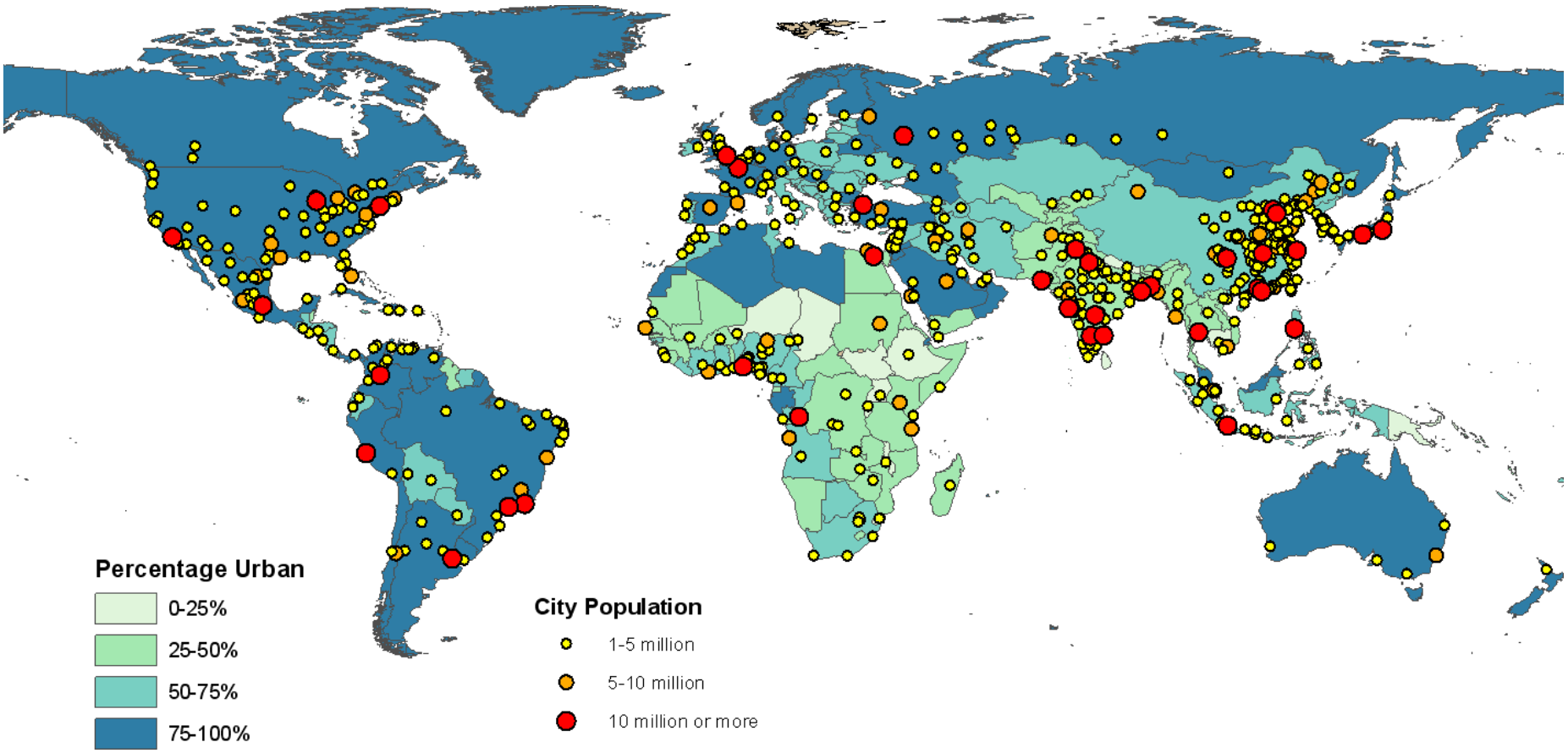
Constructing a hoop house at Chicago Lights Urban Farm, 2012

Context: Global Urbanization in 2011



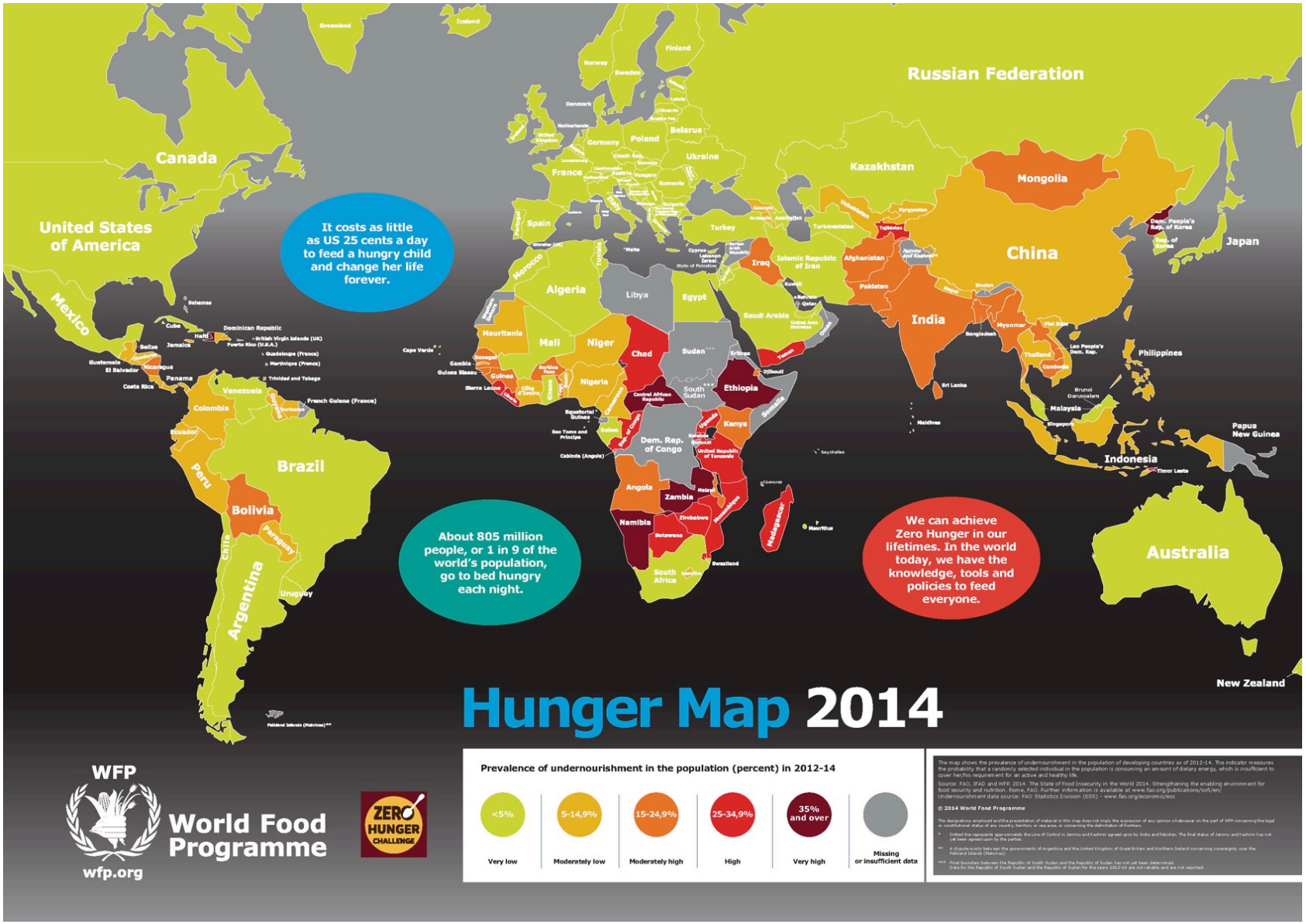
Source: United Nations, Department of Economic and Social Affairs, Population Division. *World Urbanization Prospects, the 2011 Revision*. New York, 2012

Global Urbanization: 2025 Projection



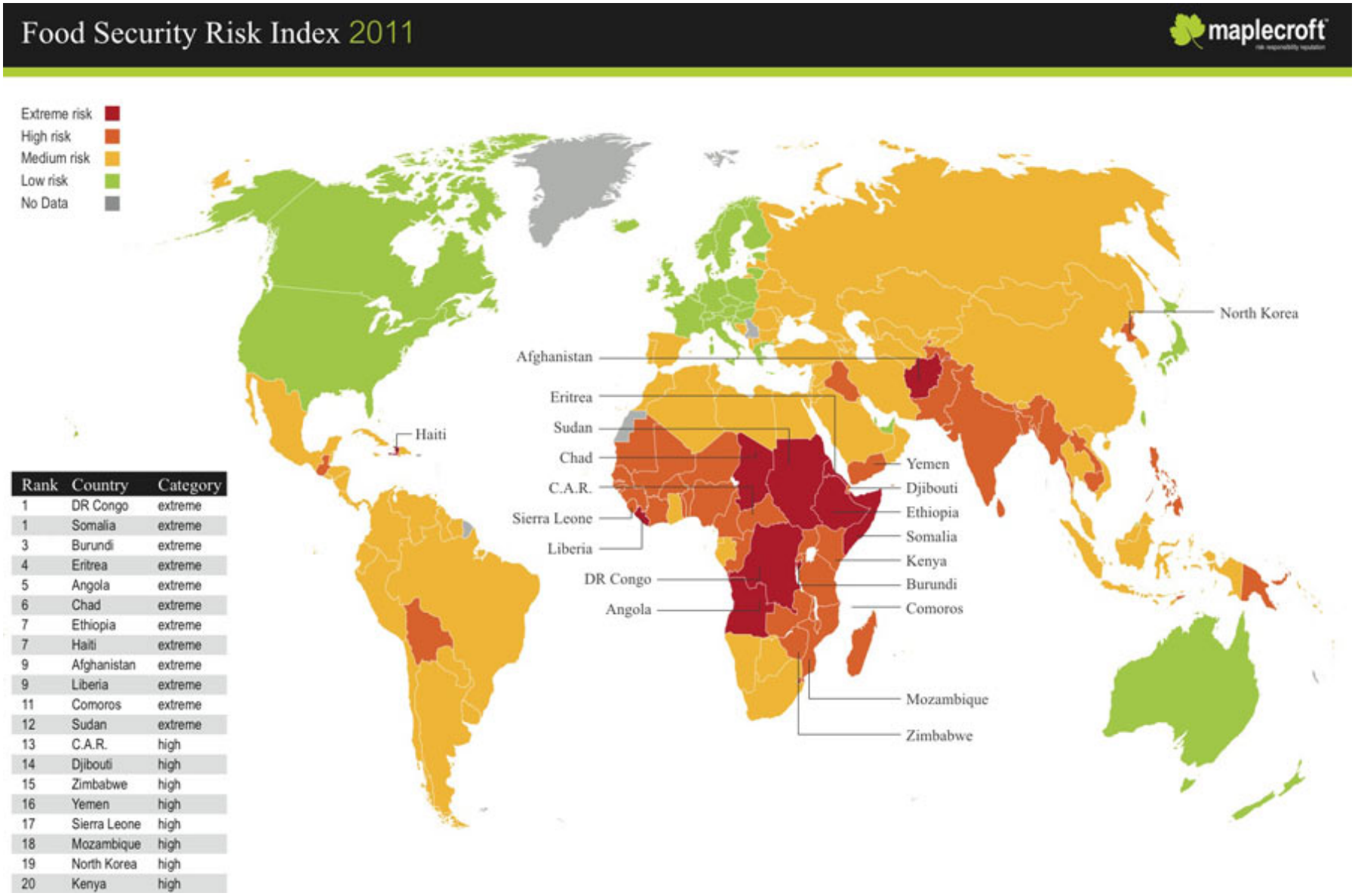
Source: United Nations, Department of Economic and Social Affairs, Population Division. *World Urbanization Prospects, the 2011 Revision*. New York, 2012

Pervasive Hunger Despite Abundant Food



Map: World Food Programme publications

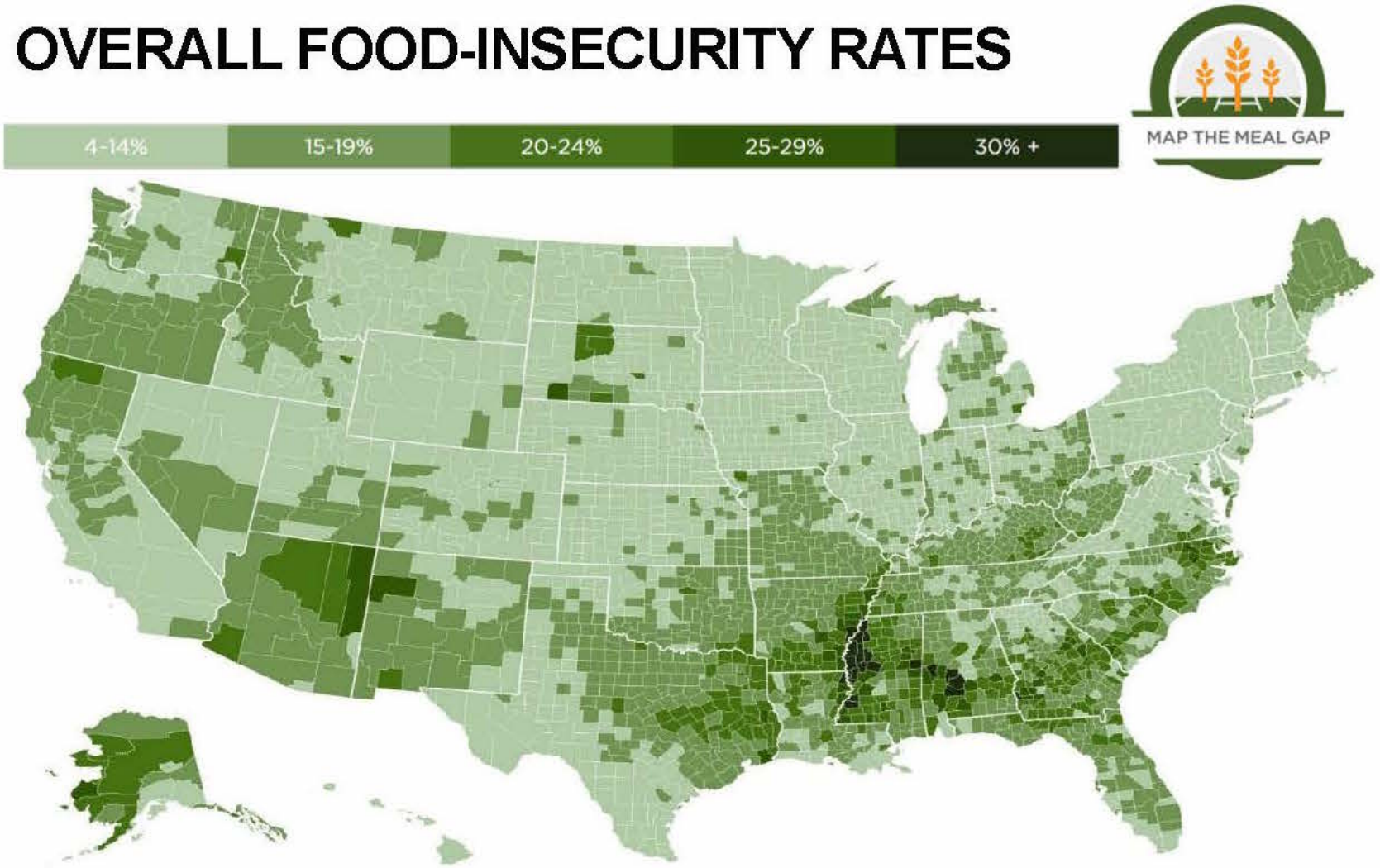
Food Insecurity on a Global Scale



Rank	Country	Category
1	DR Congo	extreme
1	Somalia	extreme
3	Burundi	extreme
4	Eritrea	extreme
5	Angola	extreme
6	Chad	extreme
7	Ethiopia	extreme
7	Haiti	extreme
9	Afghanistan	extreme
9	Liberia	extreme
11	Comoros	extreme
12	Sudan	extreme
13	C.A.R.	high
14	Djibouti	high
15	Zimbabwe	high
16	Yemen	high
17	Sierra Leone	high
18	Mozambique	high
19	North Korea	high
20	Kenya	high

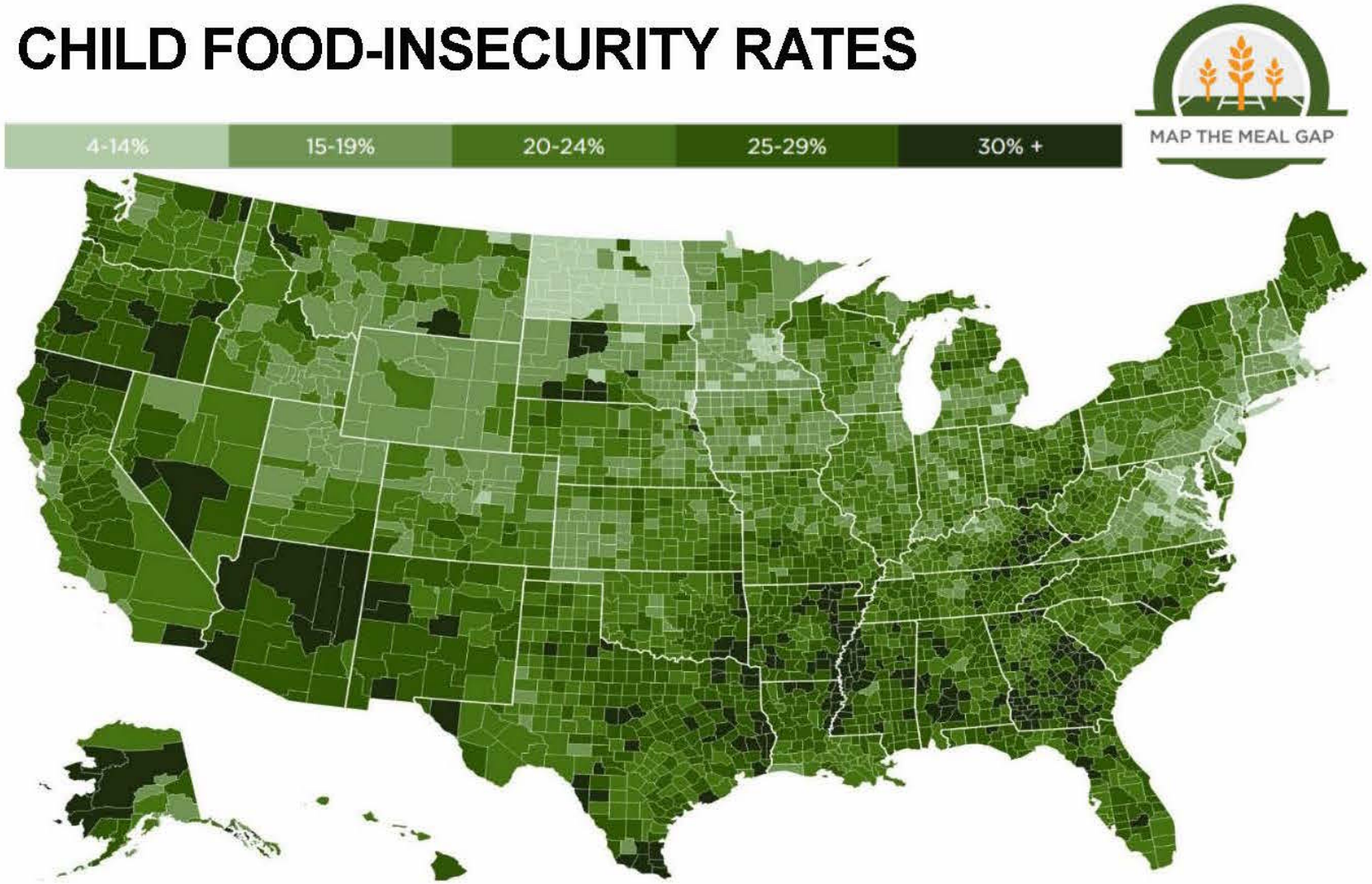
Food insecurity map by Maplecroft (source: Carrington, The Guardian, 2011)

Food Insecurity on a National Scale



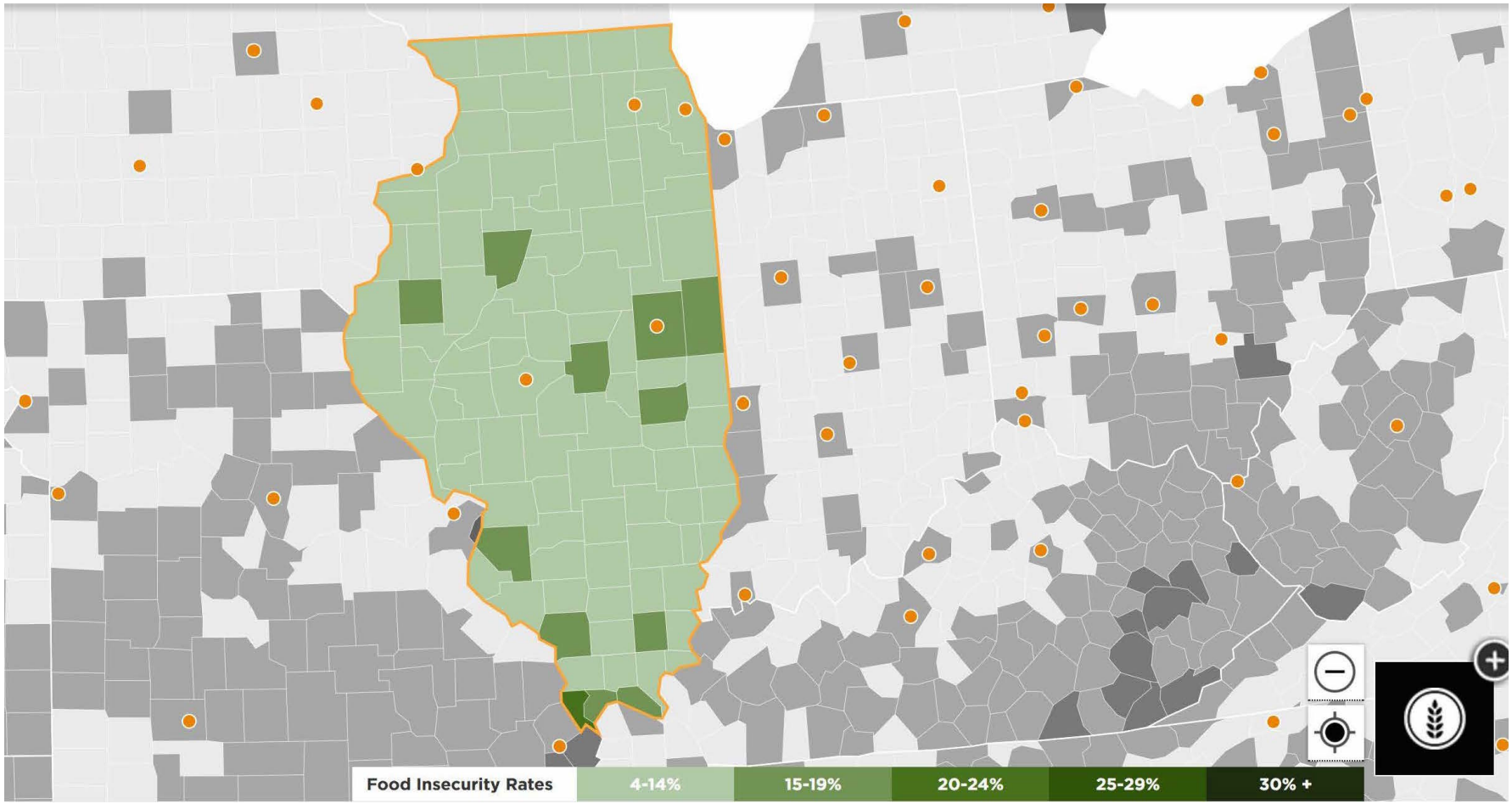
Food insecurity map of US (source: C. Gunderson, 2017)

Food Insecurity on a National Scale



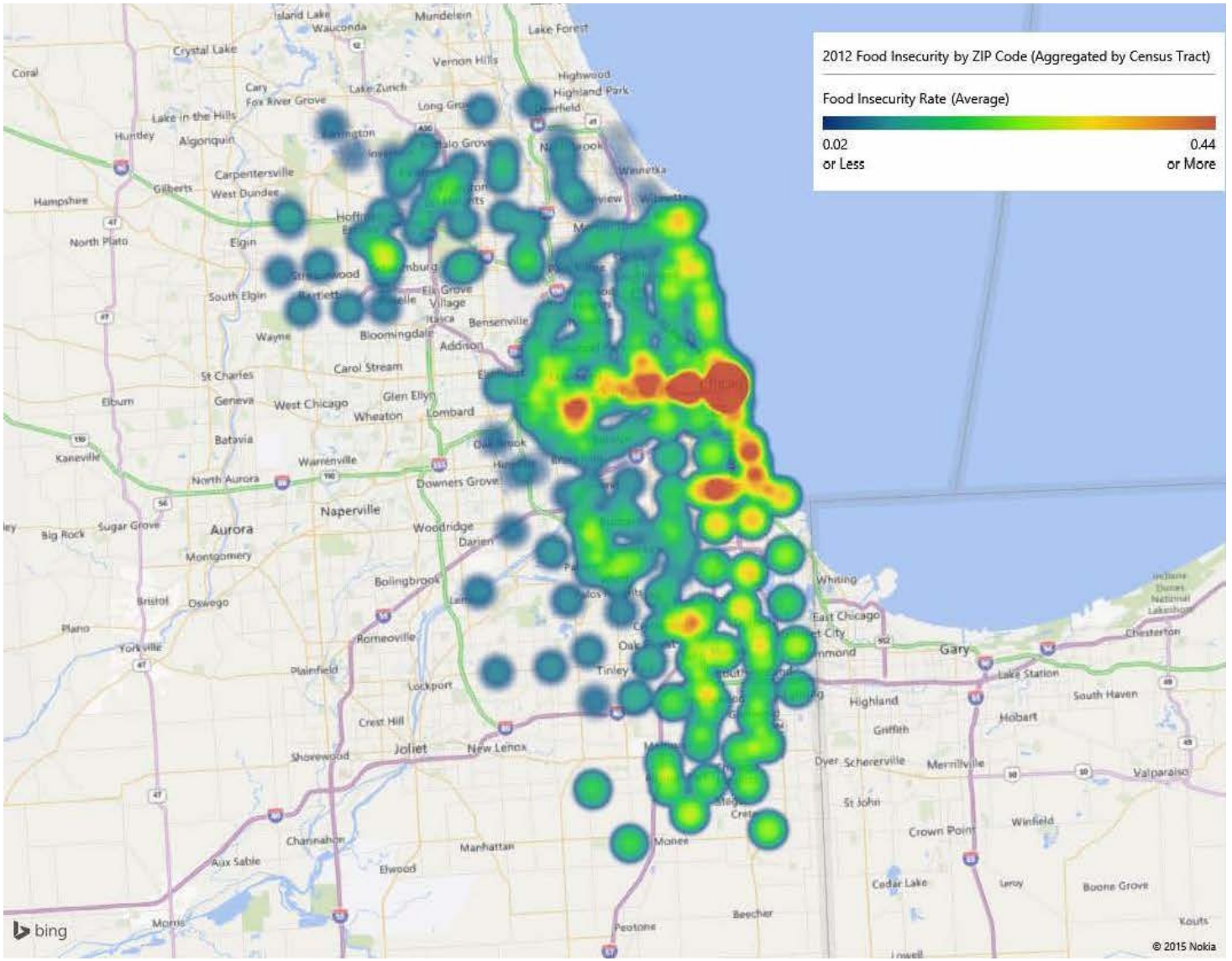
Food insecurity map of US (source: C. Gunderson, 2017)

Food Insecurity in Illinois



Food insecurity map of IL (source: C. Gunderson, 2017)

Food Insecurity in Cook County



Food insecurity map of Cook County, IL (source: C. Gunderson, 2017)

Food Access

Where does our food come from? How far does it travel? What quality does it possess? Who has access to it? RU & CPS field trip to Greenhouse at Growing Power's flagship farm, Milwaukee WI, March 2012 (photo: M. Bryson)

Defining "Food Desert" (from the USDA website)

According to the USDA, "a food desert . . . [is] a **census tract with a substantial share of residents who live in low-income areas that have low levels of access to a grocery store or healthy, affordable food retail outlet**."
[emphasis added]

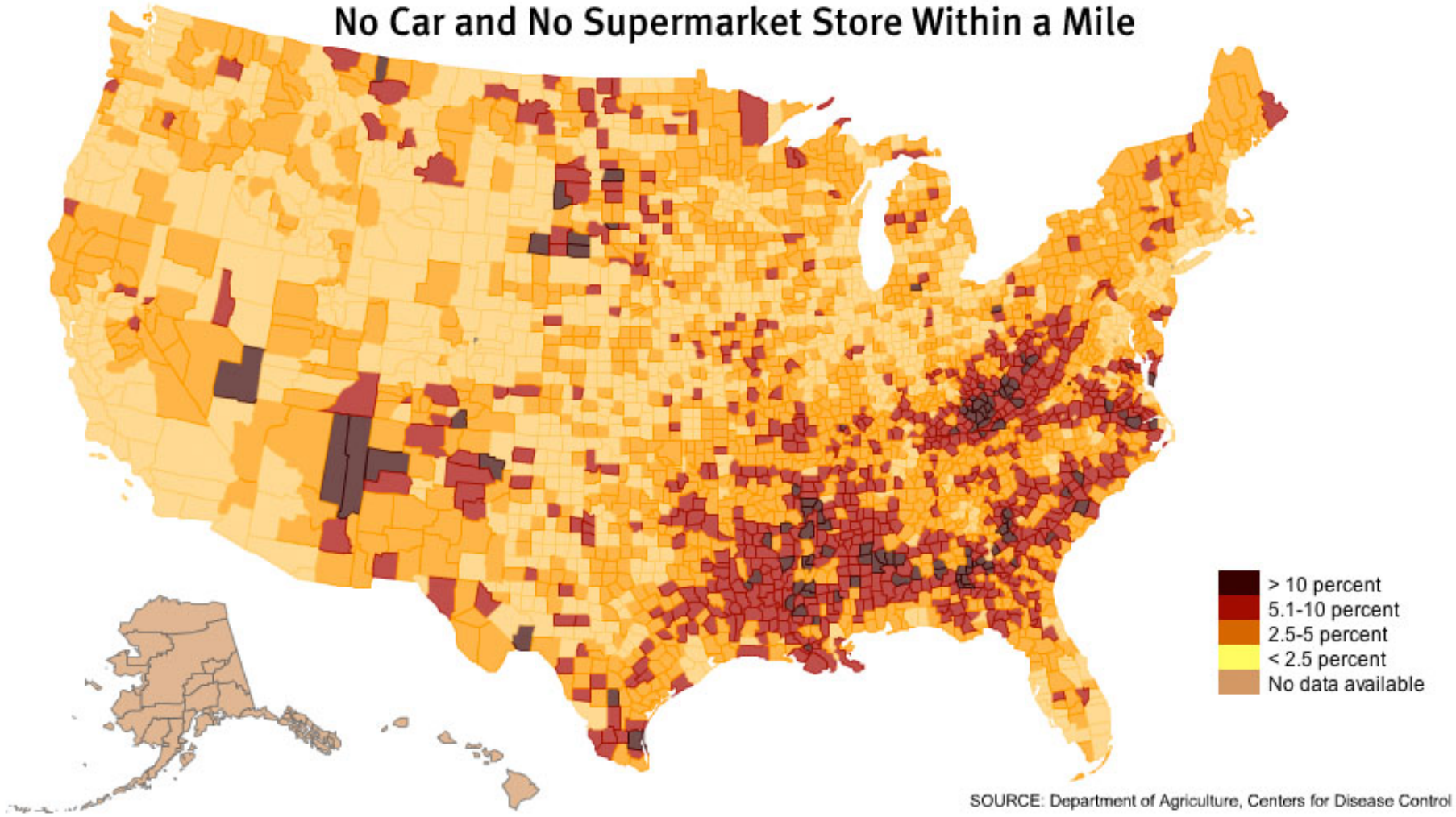
"Census tracts qualify as food deserts if they meet low-income and low-access thresholds:

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 population live more than one mile from a supermarket or large grocery store (10 miles, in the case of non-metropolitan census tracts)."

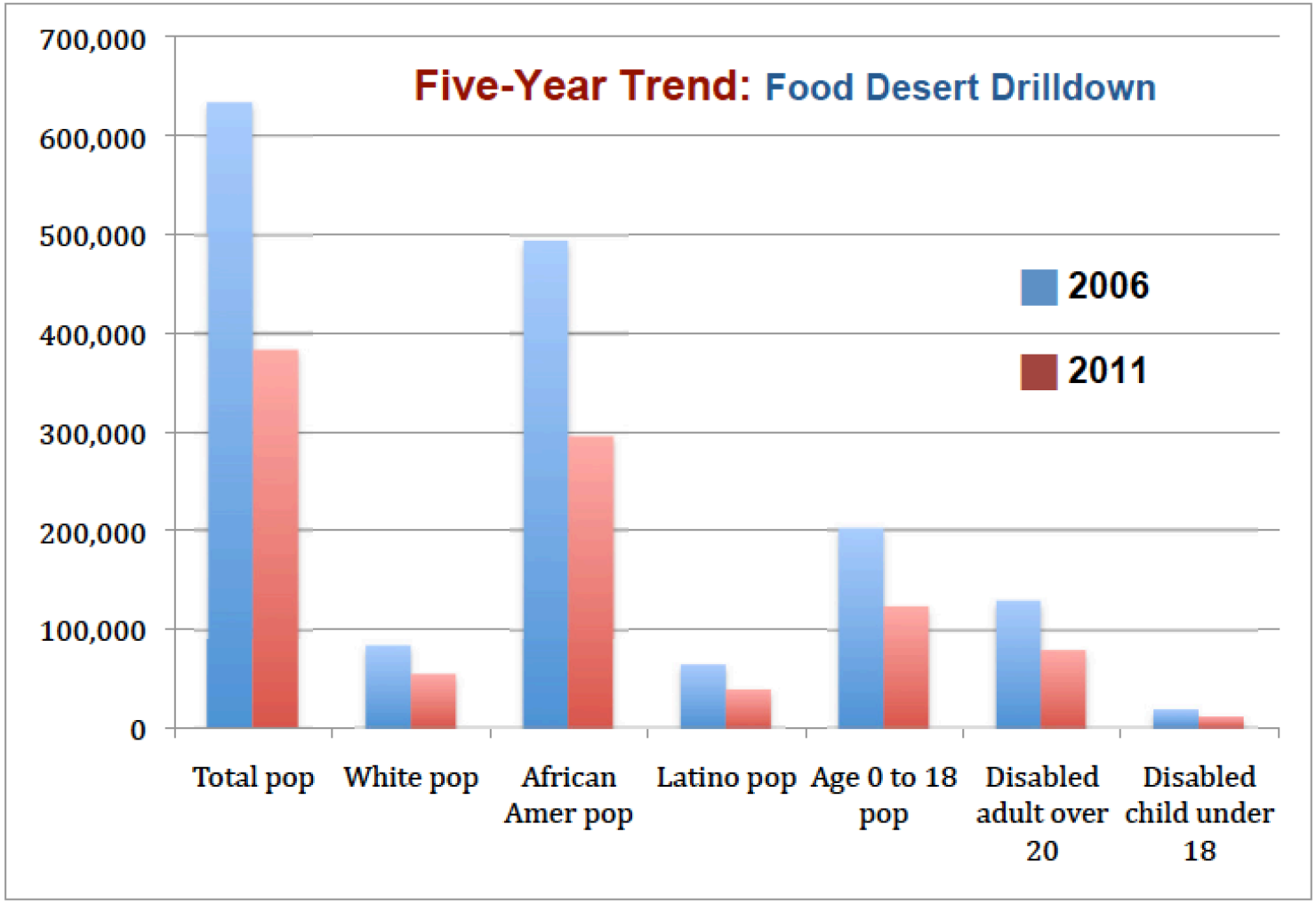
Source: USDA, "Food Deserts" (http://apps.ams.usda.gov/fooddeserts/foodDeserts.aspx)

Food Deserts



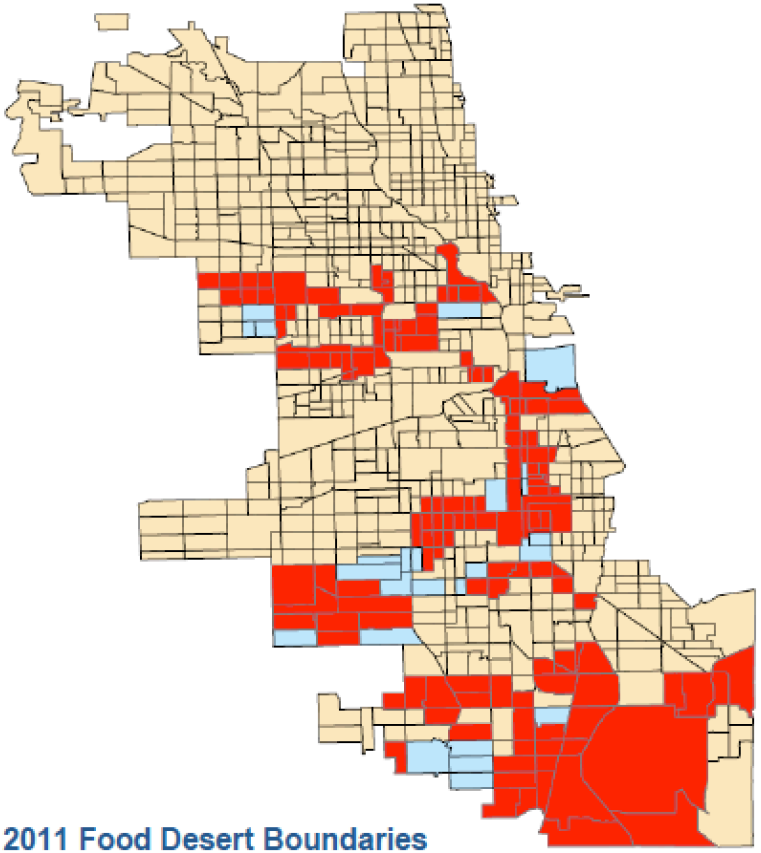
How easy is it for us to access quality food sources?
(Map source: Nutrition Digest 37.2)

Food Deserts in Chicago



Source: M. Gallagher, "The Chicago 2011 Food Desert Drilldown"

Food Deserts in Chicago



2011 Food Desert Boundaries

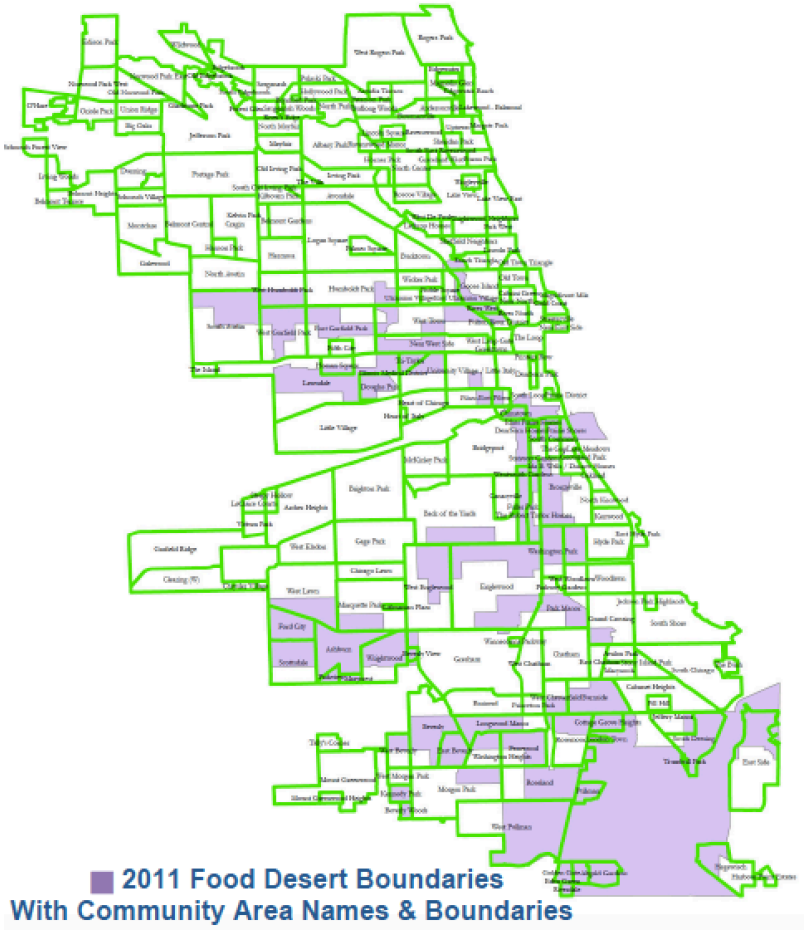
Census 2010 Tracts

Became Food Oasis in 2011

Remained in Food Desert in 2011

0 2.5 5 10 Miles

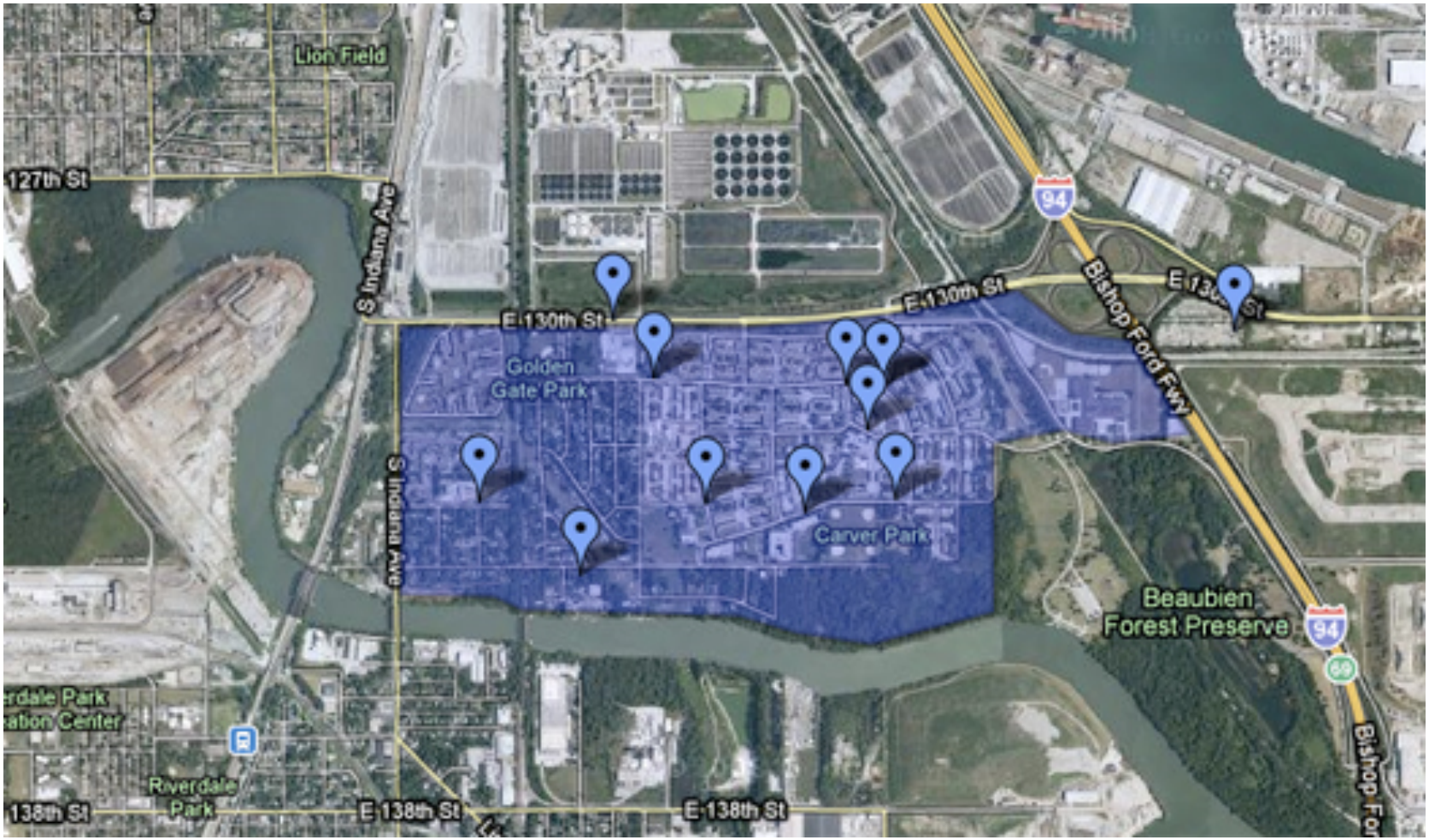
N W E S



2011 Food Desert Boundaries
With Community Area Names & Boundaries

Source: M. Gallagher, "The Chicago 2011 Food Desert Drilldown"

Food Access & Environmental Justice



The Altgeld Gardens neighborhood on the far South Side of Chicago:
A food desert as well as a "toxic doughnut," as described by resident
and environmental justice advocate Hazel Johnson (click image for interactive map)

Food Access & Environmental Justice

Growing Power established a farm site at Altgeld Gardens in 2010.
(photo: Growing Power)

The Diversity of Urban Agriculture

Clockwise from top left: Brooklyn Grange Farm, NYC (top); Iron Street Farm, Chicago IL; Veggielution Farm, San Jose CA; Bryson bungalow garden, Joliet IL

The Diversity of Urban Agriculture

Spectrum of Urban Agriculture Projects

P-Patches

Location:
Seattle, WA

Soil Based at Ground Level

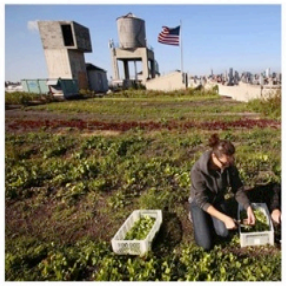
Photo Credit: Joe Mabel

Growing Power

Location:
Milwaukee,WI

Soil Based & Aquaponic

Photo Credit: Justin Leonard



Brooklyn Grange

Location:
Brooklyn, NY

Soil Based on Rooftops

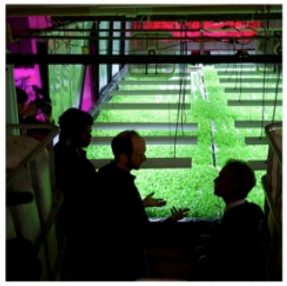
Photo Credit: Joe Wolf

Lufa Farms

Location:
Montreal,Quebec

Hydroponic on Rooftops

Photo Credit: Lufa Farms



The Plant

Location:
Chicago, IL

Hydroponic Indoors

Photo Credit: Plant Chicago

Eco Laboratory

Location:
Seattle, WA

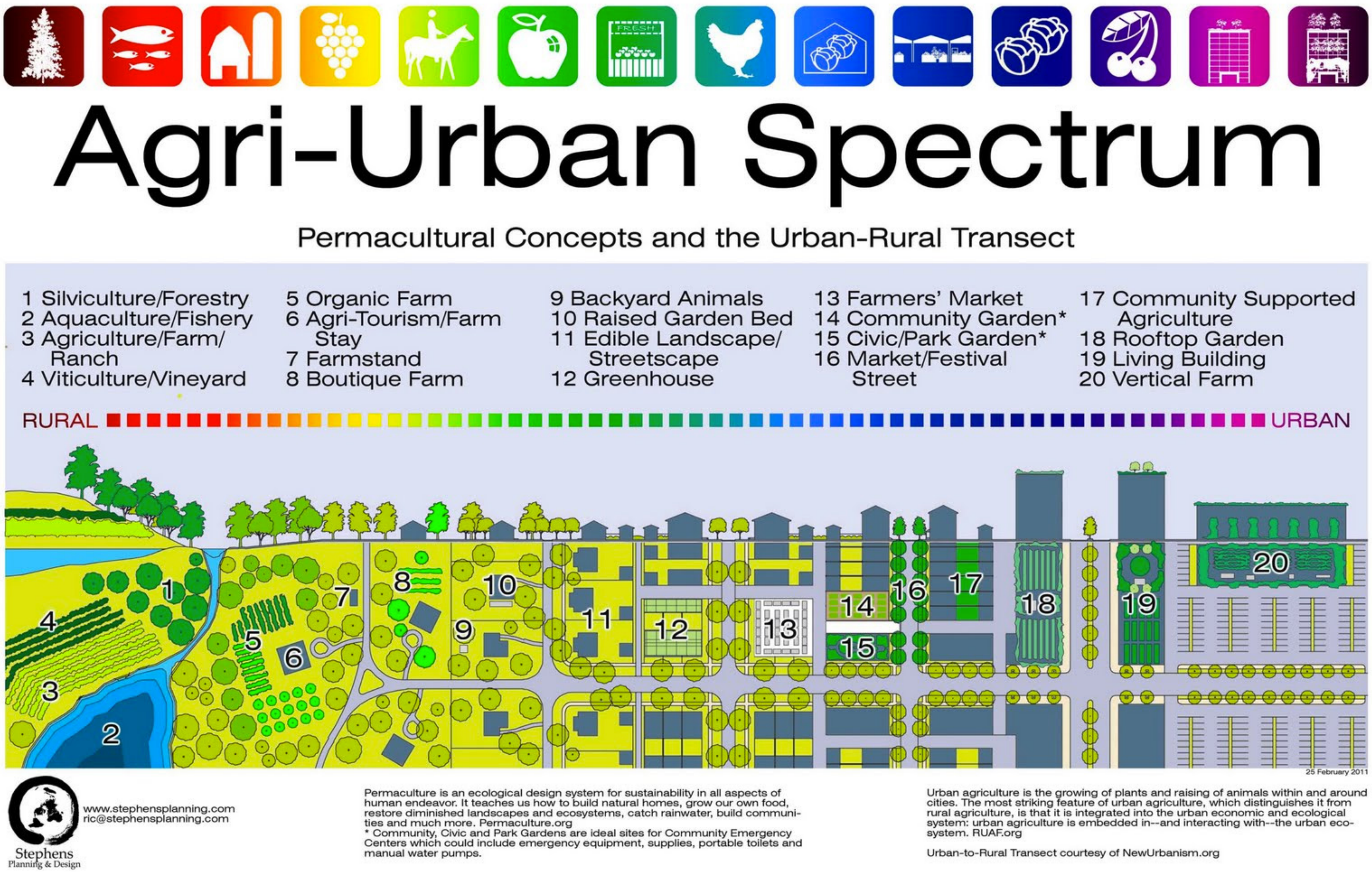
Building Integrated Hydroponic Indoors

Photo Credit: Weber Thompson

Low — Technology Gradient In Urban Agriculture — **High**

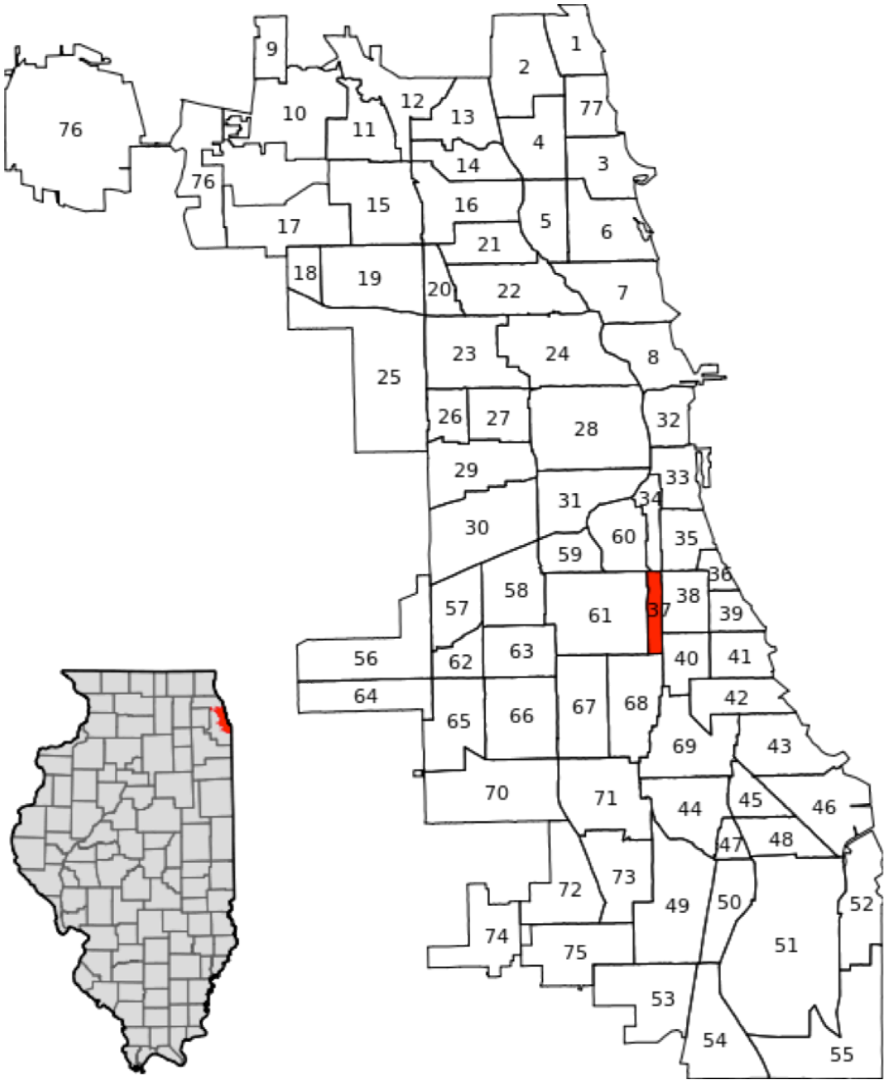
Soil — Growing System Base — **Water**

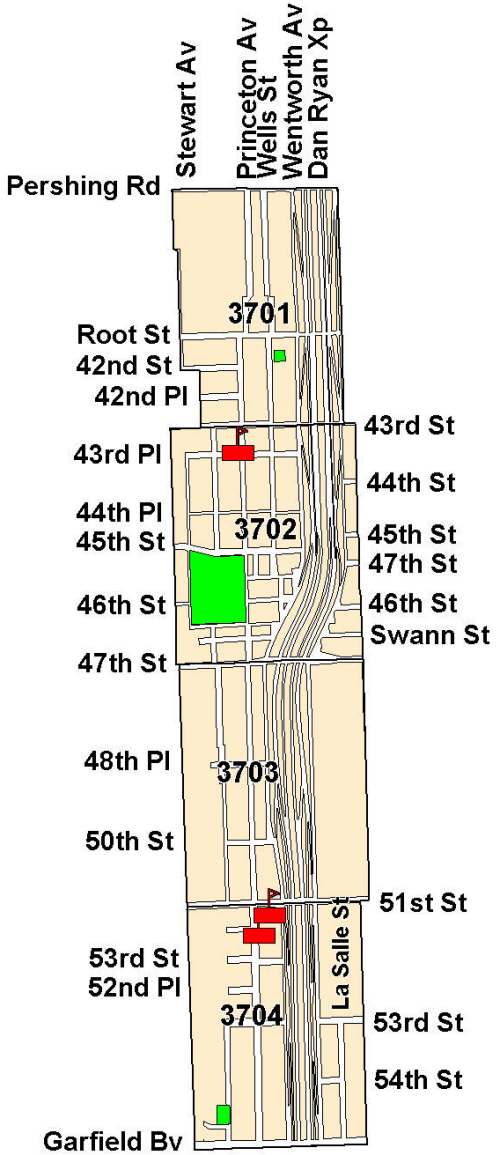
Source: [Great City.org](), 2014



Source: Stephens Planning and Design / Urbanist Dispatch

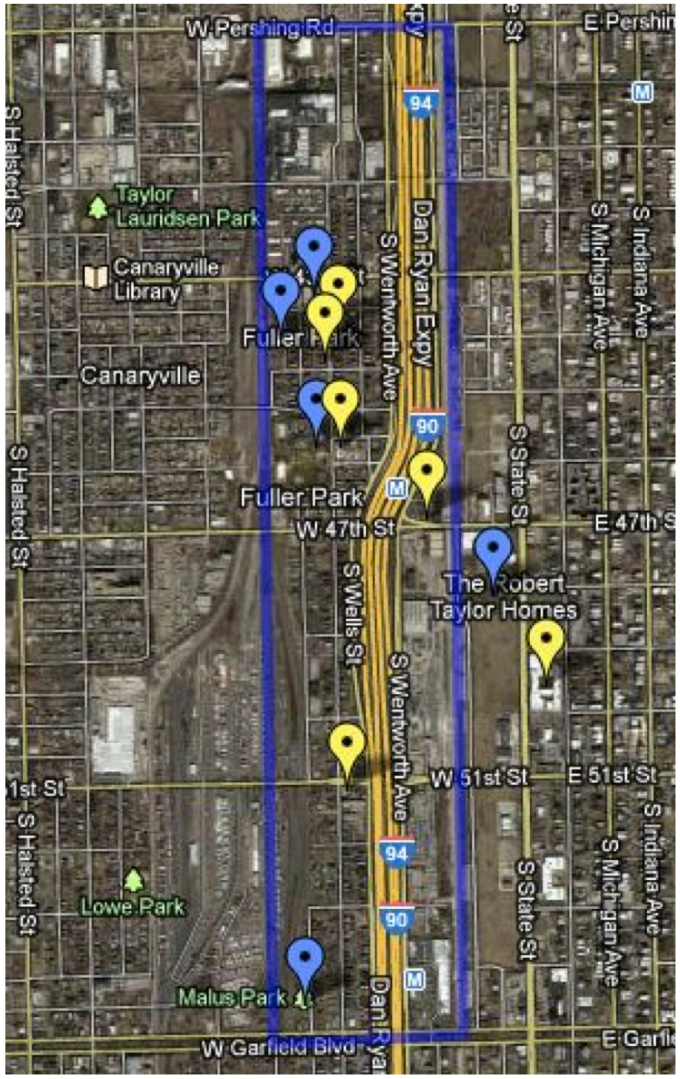
Urban Agriculture & Community Renewal





Fuller Park community area in Chicago

Urban Agriculture & Community Renewal



Fuller Park neighborhood

- One of the smallest Community Areas in Chicago in terms of population (2,876 in 2010, down 34% from 1990)
- 92% African-American
- >75% of children live in poverty
- Legacy of environmental contamination, loss of jobs
- Bounded, bisected, and polluted by RRs and highways

Key sustainability assets:

- Eden Place Nature Center / Farm
- Fuller Park Community Development Organization

Urban Agriculture & Community Renewal

Eden Place Farm, Chicago's South Side, Sept. 2017 (photo: E. Vuillemot)

Urban Agriculture & Nature Education

An urban miracle: Eden Place Nature Center, Chicago's South Side (photos: EPNC)

Food @ RU: Service Learning

SUST 350 Service & CPS students building a hoop house,
Chicago Lights Urban Farm, May 2012 (M. Bryson)

Food @ RU: Service Learning

SUST 350 Service & Sustainability, Fall 2014
Planting trees at Eden Place Nature Center (photo: M. Bryson)

Food @ RU: Creating a Community Garden

Breaking ground on the Schaumburg Campus Community Garden, April 2012
(photo: M. Bryson)

Food @ RU: Tending the Rooftop Garden

SUST alum Rebecca Quesnell works the WB Rooftop Garden at the Chicago Campus, July 2016 (photo: T. Mucci)

Food @ RU: Tending the Rooftop Garden

RU student volunteers harvest herbs from the WB Rooftop Garden for the first American Dream Service Day, Sept 2016 (photo: Roosevelt Univ.)

Composting: Putting Food "Waste" to Work

SUST 250 Sustainable University students conduct Compost Pilot Project in Spring 2017 to reduce food waste on RU's Chicago Campus
(poster design by R. Avidi and E. Vuillemot; photo by E. Vuillemot)

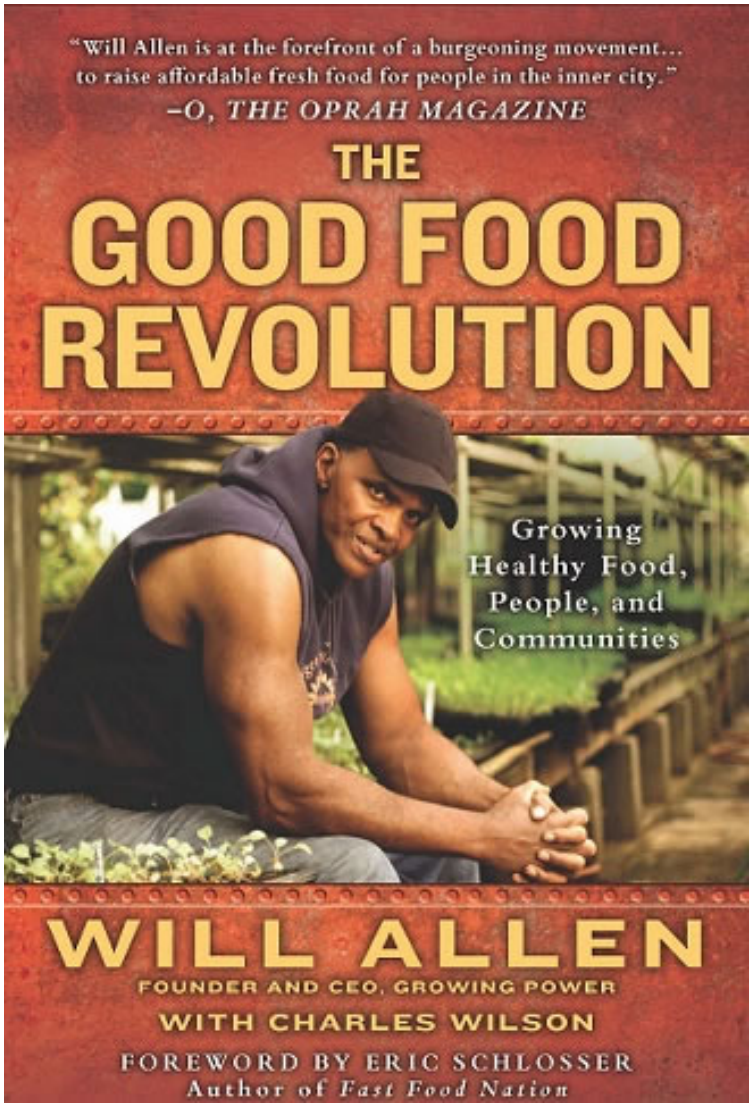
Learning about Food & Sustainability @ RU

ROOSEVELT UNIVERSITY

Students & faculty explore food, urban agriculture, & sustainability both on & campus.
Left: field trip to Angelic Organics Farm (Caledonia IL) in **SUST 230 Food**
Right: harvesting greens at Chicago Lights Urban Farm in **SUST 350 Service**

Hungry for Change? Listen to this Man!

Mr. Will Allen -- Urban Farmer,
Founder of Growing Power,
Sustainability Entrepreneur,
Food Justice Advocate, Author



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