UTOPIAE INSVLAE FIGVRA

Healthy Cities Design International 2019
Royal College of Physicians – London, UK

How Community-focused Systems
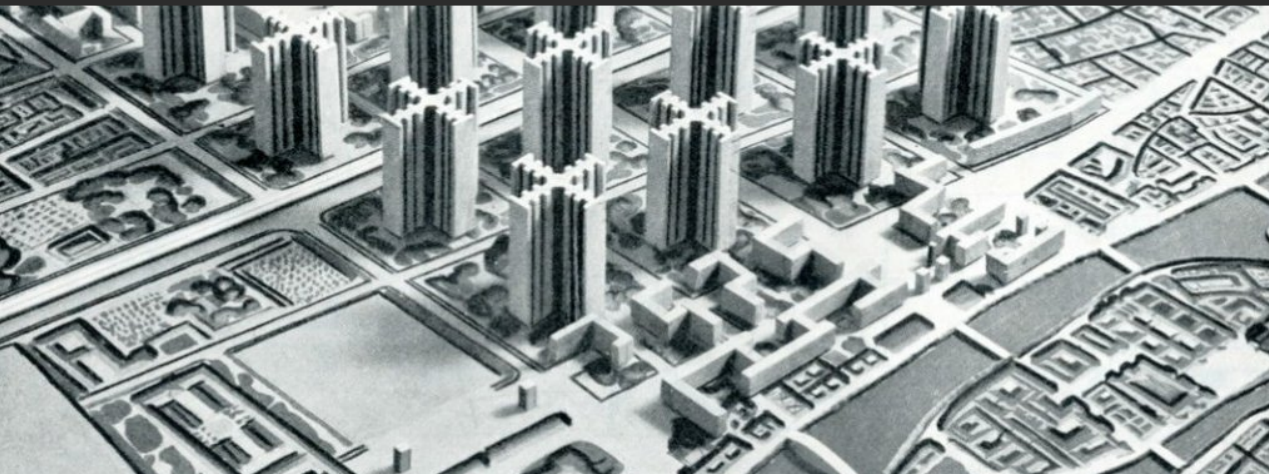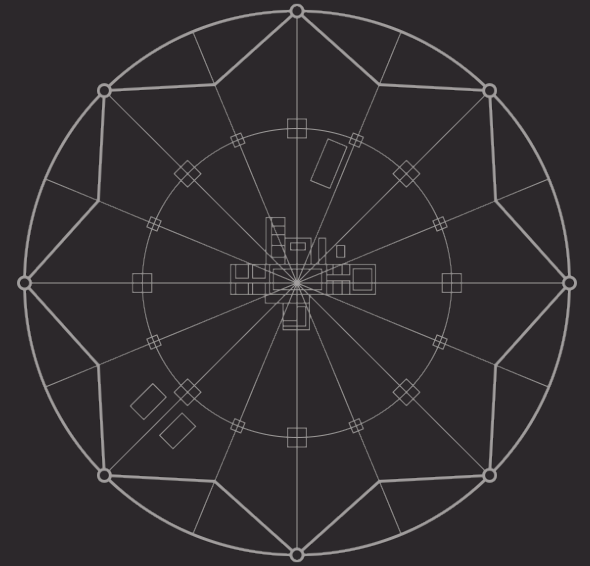are Addressing Urban-Global Issues
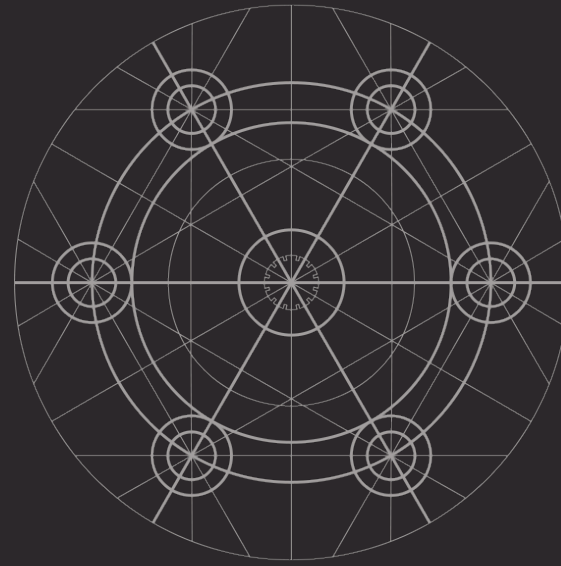
Stantec

Agenda

1. A Brief History of Utopias
2. Intended & Unintended Consequences
3. Community-focused Systems
   - BREEAM Communities
   - LEED-ND
   - Living Community Challenge
   - WELL Communities
   - Fitwel Communities
   - 100 Resilient Cities
   - EcoDistricts
   - AIA 2030 Districts
4. Themes

CHAOS

ORDER

356B

BIG BROTHER IS
WATCHING YOU

The world map of overnutrition

Legend:
- ≥ 30%
- 20-29.9%
- 10-19.9%
- 5-9.9%
- < 5%
- no data
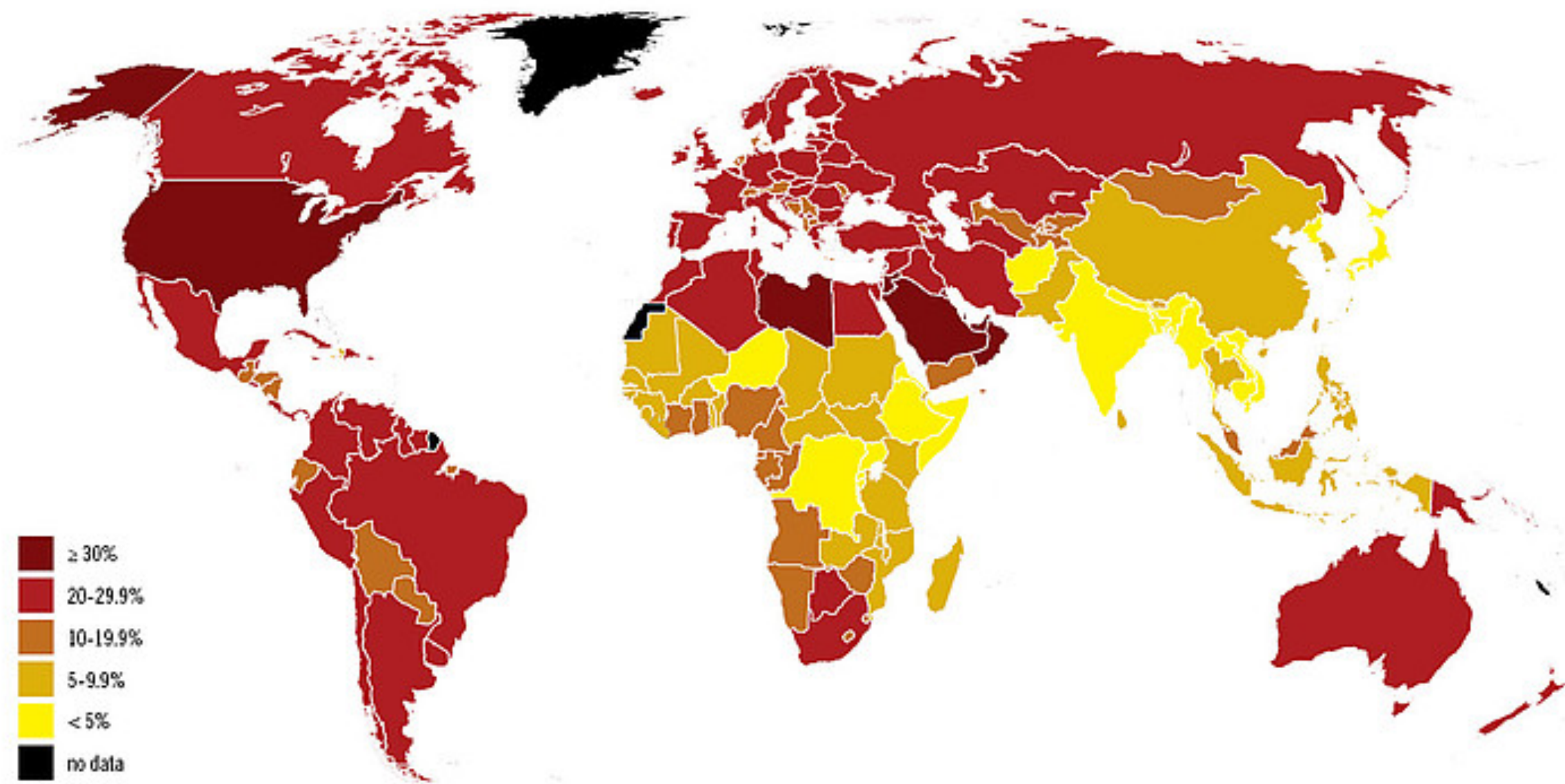
Prevalence of obesity in adults (BMI ≥30)
in the population of a country

INTERNATIONAL LIVING FUTURE INSTITUTE℠

U.S. GREEN BUILDING COUNCIL USGBC

The ROCKEFELLER FOUNDATION

EcoDistricts®

CENTER FOR ACTIVE DESIGN®

INTERNATIONAL WELL BUILDING INSTITUTE™

2030 DISTRICTS®

BREEAM® delivered by bre

1 Introduction

2 The BIG Idea

3 Example

BREEAM®

www.breeam.org/communities

BREEAM Communities

Integrating sustainable design into masterplanning

bre

Project Type   Communities

ADVANCED SEARCH +

SEARCH   RESET   CHANGE DISPLAY

Greenland

Finland

Sweden

Norway   13

2

United Kingdom   Poland

25   Ukraine   Russia

any

Fr   e   Italy   3

Spa   Turkey   Kazakhstan   Mongolia

Iraq   Afghanistan   China   Japan

Algeria   Libya   Egypt   Pakistan   uth Korea

Mali   Niger   Saudi Arabia   India   Thailand

Chad   Sudan

Nigeria   Ethiopia

DRC   Kenya

Tanzania   Indonesia   Papua New Guinea

Angola

Namibia   Madagascar

Botswana   Australia

South Africa

Average Impervious
Surface Area (%)

- 🔵 0 - 19 (minimally urbanized)
- 🟢 20 - 49 (moderately urbanized)
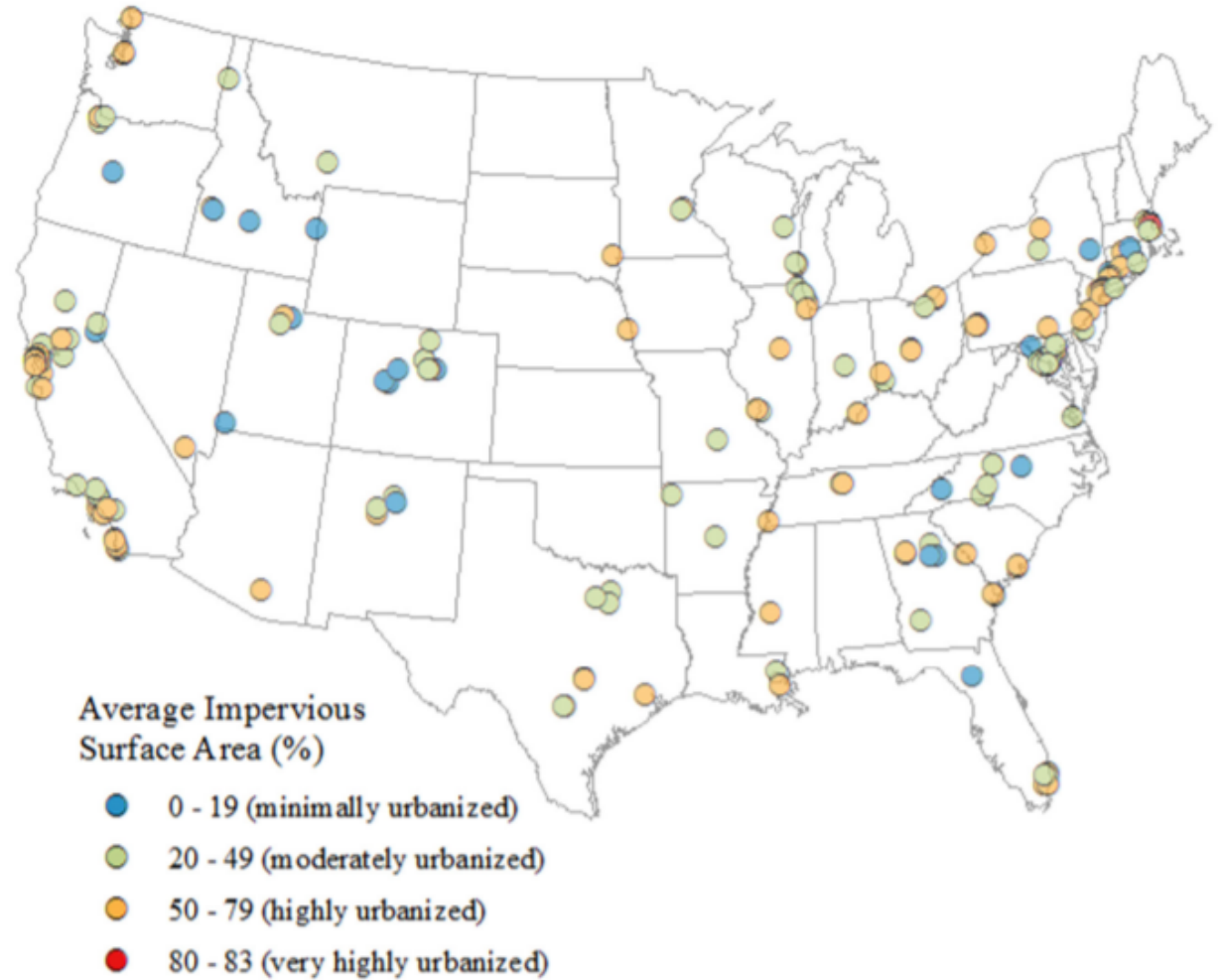- 🟠 50 - 79 (highly urbanized)
- 🔴 80 - 83 (very highly urbanized)

Figure 3. Average percent impervious surface area within 1.5 km of LEED®-ND™ sites.

LIVING COMMUNITY CHALLENGE℠ 1.2

A Visionary Path to a Regenerative Future

INTERNATIONAL **LIVING FUTURE** INSTITUTE℠

PETALS

Imagine communities that function like a forest ecosystem. The Living Community Challenge is organized into seven performance areas.

PLACE

Restoring a healthy coexistence with nature .

WATER

Creating water independent sites, buildings and communities.

ENERGY

Relying only on current solar income.

HEALTH + HAPPINESS

Maximizing physical and psychological health and well being.

MATERIALS

Endorsing products and processes that are safe for all species through time.

EQUITY

Supporting a Just, equitable World.

BEAUTY

Celebrating plans that purpose transformative change.

1 REGISTRATION

REGISTRATION

Transect &
Limits to Growth
Check-in

2 PLANNING: PLAN COMPLIANCE

VISION PLAN

ILFI Review

Optional: Two-Phased Submission

MASTER PLAN

ILFI Review

3 IMPLEMENTATION

EMERGING
LIVING / PETAL / ZE
COMMUNITY

Periodic
ILFI Review

4 CERTIFICATION

CERTIFIED
LIVING
COMMUNITY

3rd Party Review
ILFI Certification

OR

CERTIFIED
PETAL
COMMUNITY

3rd Party Review
ILFI Certification

OR

CERTIFIED
ZERO
ENERGY
COMMUNITY

3rd Party Review
ILFI Certification

THE
WELL
COMMUNITY
STANDARD™

PILOT

The premier global standard for supporting health and well-being through inclusive, integrated and resilient communities.

Project Designers:

1 Pickard Chilton
2 Gensler
3 Baker Barrios
4 Olson Kundig
5 Morris Adjmi Architects; Interior Design by Roman & Williams
6 Morris Adjmi Architects
7 CookFox Architects
8 CookFox Architects
9 HOK Architects
10 Kohn Pedersen Fox Associates (KPF); Interior Design by Cecconi Simone
11 Alfonso Architects
12 Nichols Brosch Wurst Wolfe & Associates (NBWW); Interior Design by Champalimaud

Tampa Convention Center

Amalie Arena

Tampa Bay History Center

Marriott Waterside

Water Street

WATER STREET

TAMPA

OUR HEALTH IMPACT CATEGORIES

Each strategy within the scorecard is linked by scientific evidence to at least one of Fitwel's seven Health Impact Categories:

IMPACTS COMMUNITY HEALTH

REDUCES MORBIDITY + ABSENTEEISM

SUPPORTS SOCIAL EQUALITY FOR VULNERABLE POPULATIONS
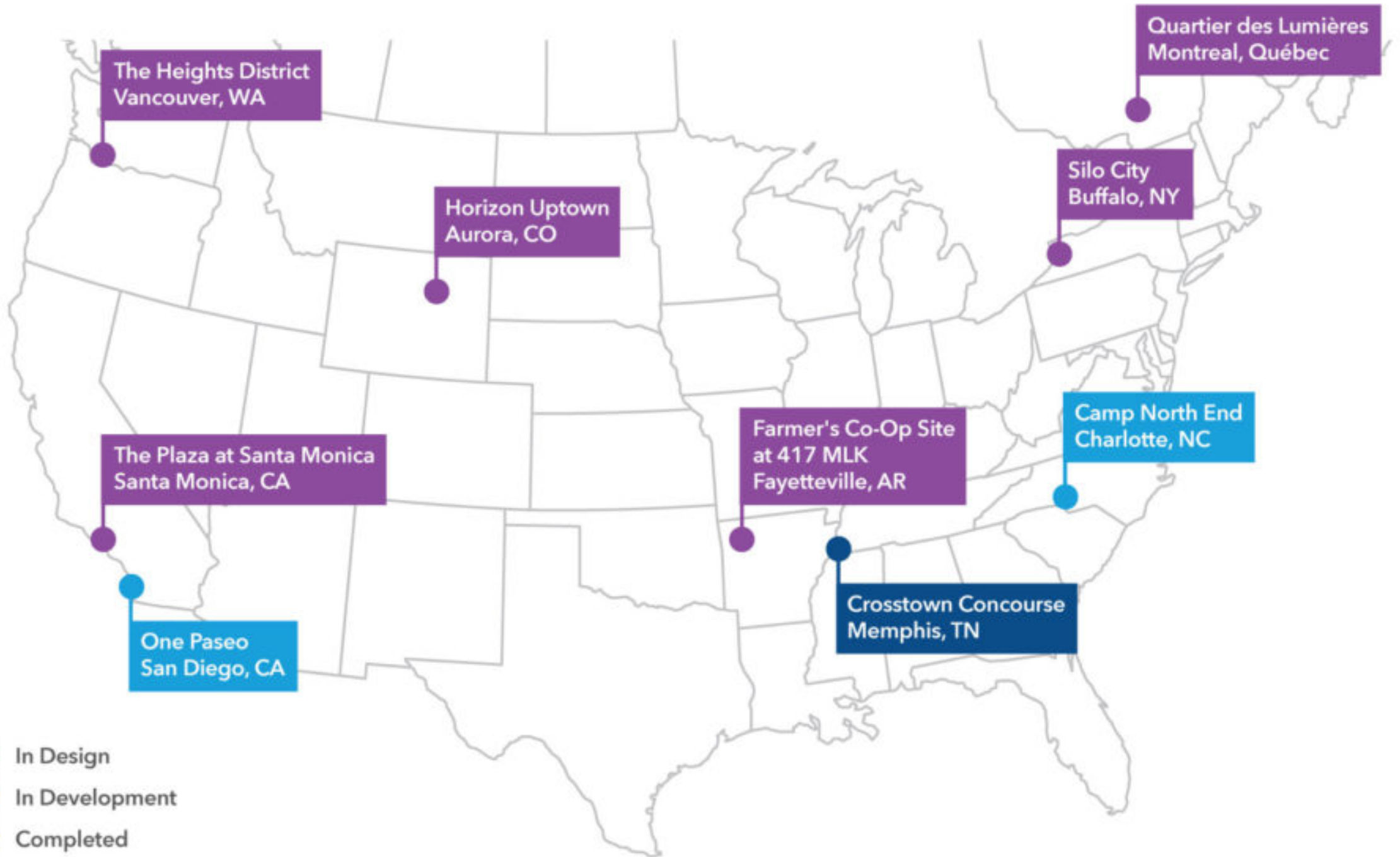
INSTILLS FEELINGS OF WELL-BEING

PROVIDES HEALTHY FOOD OPTIONS
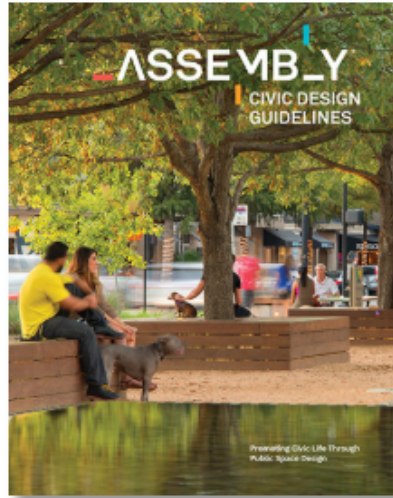
PROMOTES OCCUPANT SAFETY
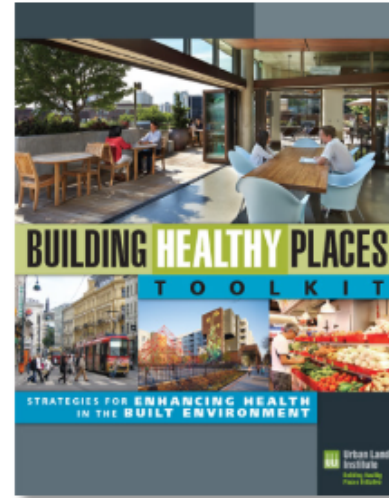
INCREASES PHYSICAL ACTIVITY

The Heights District
Vancouver, WA

Quartier des Lumières
Montreal, Québec

Silo City
Buffalo, NY

Horizon Uptown
Aurora, CO

The Plaza at Santa Monica
Santa Monica, CA

Farmer's Co-Op Site
at 417 MLK
Fayetteville, AR

Camp North End
Charlotte, NC

One Paseo
San Diego, CA

Crosstown Concourse
Memphis, TN

● In Design

● In Development

● Completed

Publications + Resources

Assembly: Civic Design Guidelines

The Active Design Guidelines

Building Healthy Places Toolkit

Assembly: Project Orientation

Assembly: Research Brief One

Assembly Civic Engagement Survey

Policy Brief: Impact In Affordable Housing

Active Design: Guide for Community Groups

Promoting Safety

Affordable Designs for Affordable Housing

SEATTLE

DETROIT ● NEW YORK

LIVERPOOL ●

MADRID ●

CHENGDU ● ● SHANGHAI

NEW ORLEANS

SHIMLA ●

DOHA ● ● HONG KONG
DUBAI
SURAT ●

HO CHI MINH CITY ●

CALI ●

QUITO ●

KAMPALA ●

BRAZZAVILLE ● ● ARUSHA
DAR ES SALAAM ●

SEMERANG ●

LIMA ●

RIO DE JANEIRO ●

SAO PAULO ●

CAPE TOWN ●

CONCEPCIÓN ● ●

MELBOURNE ●

● RESEARCH CITIES

● TEST CITIES

INDICATORS

- 1.1 Safe and affordable **housing**
- 1.2 Adequate affordable **energy supply**
- 1.3 Inclusive access to safe **drinking water**
- 1.4 Effective **sanitation**
- 1.5 Sufficient affordable **food supply**
- 2.1 Inclusive **labour policies**
- 2.2 Relevant **skills & training**
- 2.3 Local **business development and innovation**
- 2.4 Supportive **financing mechanisms**
- 2.5 Diverse **protection of livelihoods** following a shock
- 3.1 Robust **public health systems**
- 3.2 Adequate access to **quality healthcare**
- 3.3 Emergency **medical care**
- 3.4 Effective **emergency response services**
- 4.1 Local **community support**
- 4.2 Cohesive **communities**
- 4.3 Strong **city-wide identity & culture**
- 4.4 Actively **engaged citizens**
- 5.1 Effective **systems to deter crime**
- 5.2 Proactive **corruption prevention**
- 5.3 Competent **policing**
- 5.4 Accessible **criminal and civil justice**
- 6.1 Well-managed **public finances**
- 6.2 Comprehensive **business continuity planning**
- 6.3 Diverse **economic base**
- 6.4 Attractive **business environment**
- 6.5 Strong **integration with regional & global economies**
- 7.1 Comprehensive **hazard and exposure mapping**
- 7.2 Appropriate **codes, standards & enforcement**
- 7.3 Effectively managed **protective ecosystems**
- 7.4 Robust **protective infrastructure**
- 8.1 Effective **stewardship of ecosystems**
- 8.2 Flexible **infrastructure services**
- 8.3. Retained **spare capacity**
- 8.4 Diligent **maintenance & continuity**
- 8.5 Adequate **continuity for critical assets & services**
- 9.1 Diverse and affordable **transport networks**
- 9.2 Effective **transport operation & maintenance**
- 9.3 Reliable **communications technology**
- 9.4 Secure **technology networks**
- 10.1 Appropriate **government decision-making**
- 10.2 Effective **co-ordination with other government bodies**
- 10.3 Proactive **multi-stakeholder collaboration**
- 10.4 Comprehensive **hazard monitoring and risk assessment**
- 10.5 Comprehensive **government emergency management**
- 11.1 Adequate **education for all**
- 11.2 Widespread **community awareness & preparedness**
- 11.3 Effective **mechanisms for communities to engage with government**
- 12.1 Comprehensive **city monitoring & data management**
- 12.2 Consultative **planning process**
- 12.3 Appropriate **land use and zoning**
- 12.4 Robust **planning approval process**

QUALITIES

INTEGRATED | INCLUSIVE | REFLECTIVE | RESOURCEFUL | ROBUST | REDUNDANT | FLEXIBLE

© Arup

"Resilience is based on the shifting relationship between scales, and between autonomy on the one hand and connectivity on the other."

Allan, P. & Bryant, M. (2011) 'Resilience as a framework for urbanism and recovery'. Journal of Landscape Architecture 6(2), p. 43

1,529
ACROSS
47
PROTOCOL DOWLOADS
COUNTRIES

149
NEW AMBASSADORS + MEMBERS

$1 MM
RAISED FROM MEMBERS, DONORS, SPONSORS + FOUNDATIONS
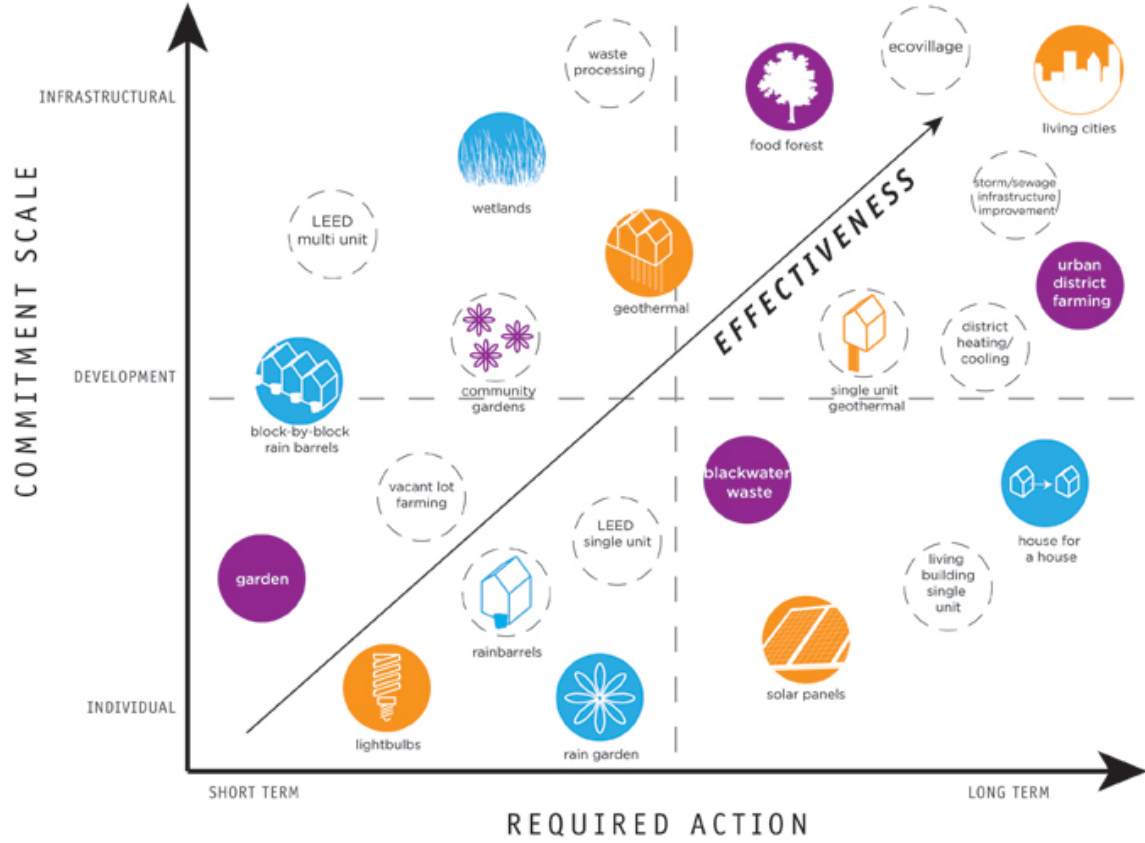
48
CONVENING SCHOLARSHIPS AWARDED

91%
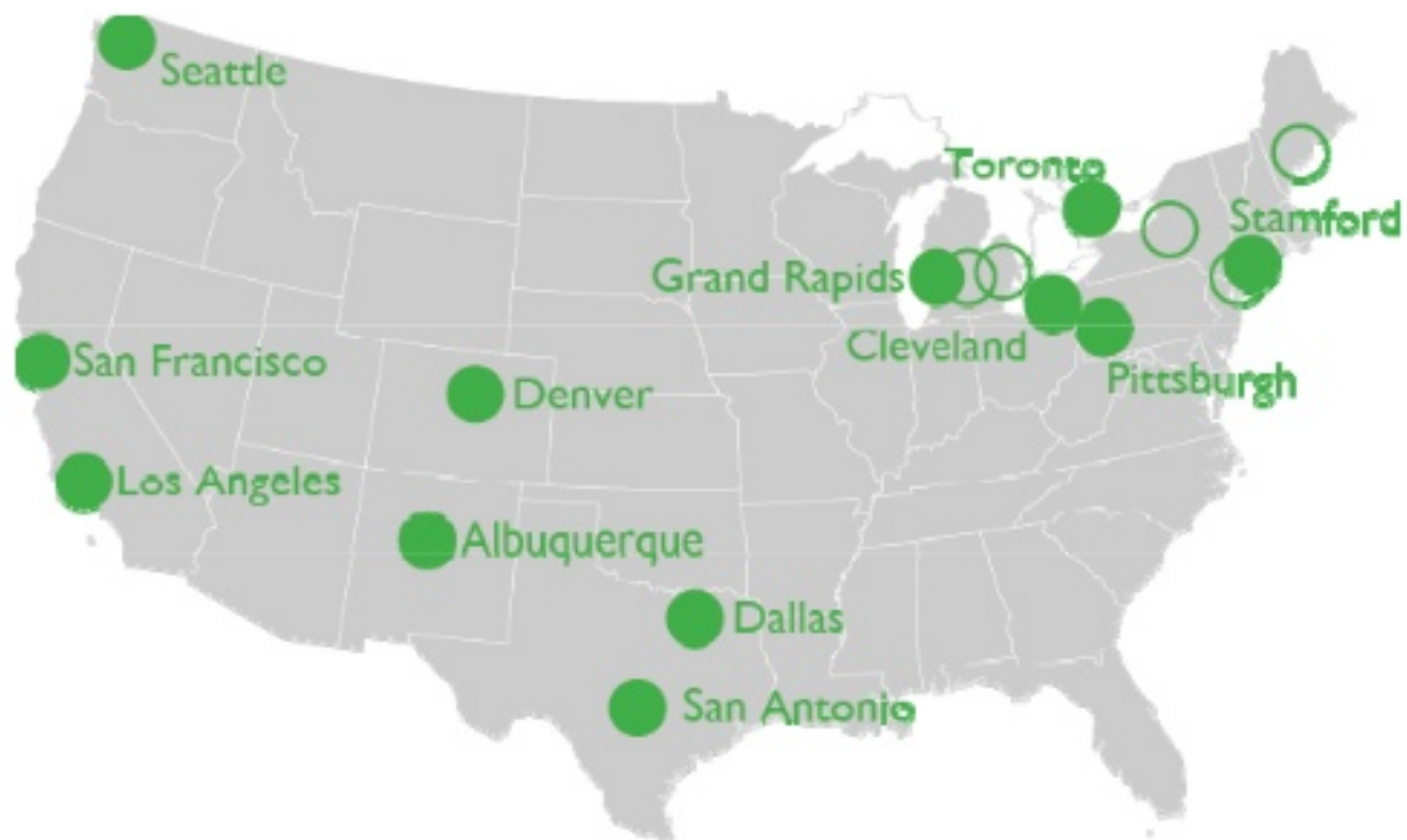OF ATTENDEES RATE OUR CONVENINGS AS EXCEPTIONAL OR VERY GOOD

ECO-DISTRICTS SCALE + ACTION

COMMITMENT SCALE
- INFRASTRUCTURAL
- DEVELOPMENT
- INDIVIDUAL

EFFECTIVENESS

- waste processing
- ecovillage
- food forest
- living cities
- wetlands
- LEED multi unit
- storm/sewage infrastructure improvement
- geothermal
- urban district farming
- community gardens
- single unit geothermal
- district heating/cooling
- block-by-block rain barrels
- vacant lot farming
- blackwater waste
- LEED single unit
- house for a house
- garden
- rainbarrels
- living building single unit
- lightbulbs
- rain garden
- solar panels

SHORT TERM — LONG TERM
REQUIRED ACTION

PHASE 1 - FORMATION
PHASE 2 - ROADMAP
PHASE 3 - ACTION
PHASE 4 - STEWARDSHIP

- Livability
- Ecosystem Stewardship
- prosperity
- Climate & Resources
- Mobility & Connectivity
- Health & Wellness

CLIMATE
EQUITY
RESILIENCE

2030

DISTRICTS®
NETWORK

74.3% OF THE DISTRICT COMMITTED

506 BUILDINGS COMMITTED

81.7M SQUARE FEET

102 PROPERTY PARTNERS

COMMITTED

COMMITTED UNBUILT
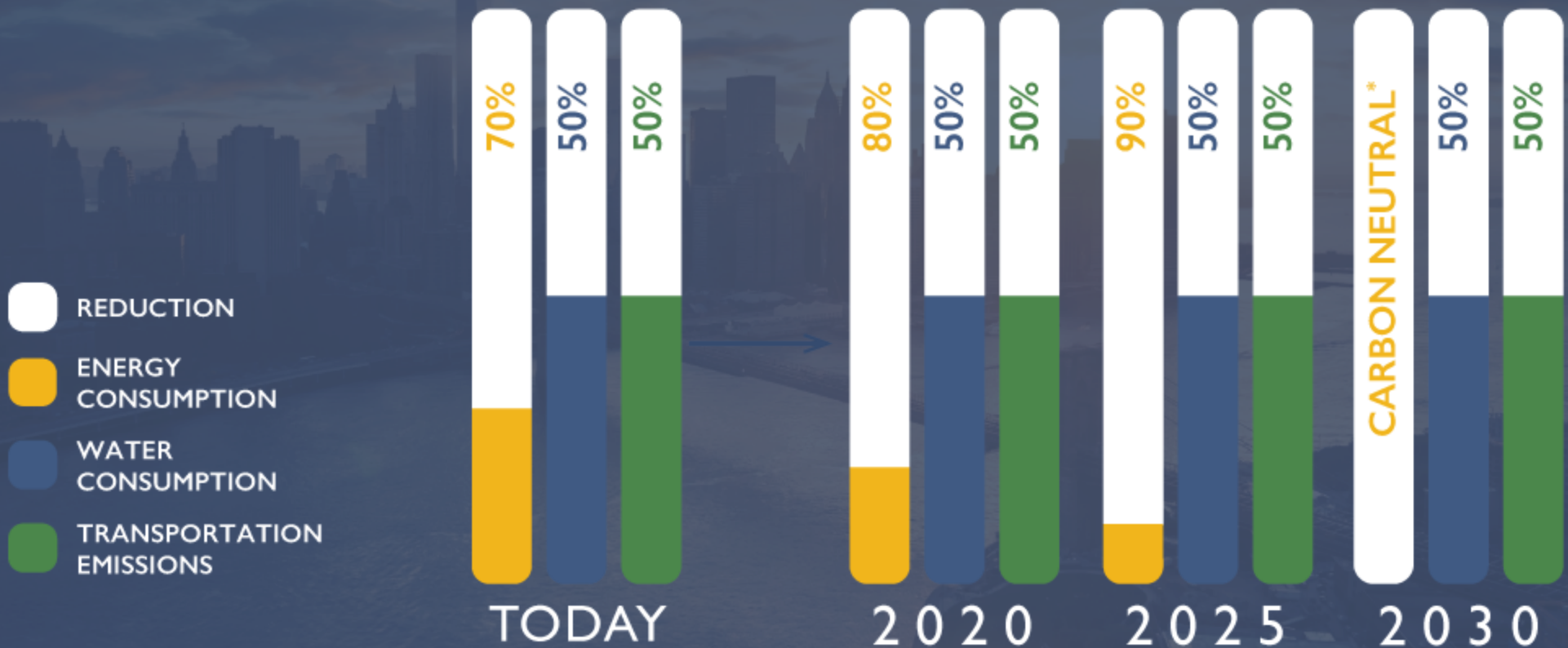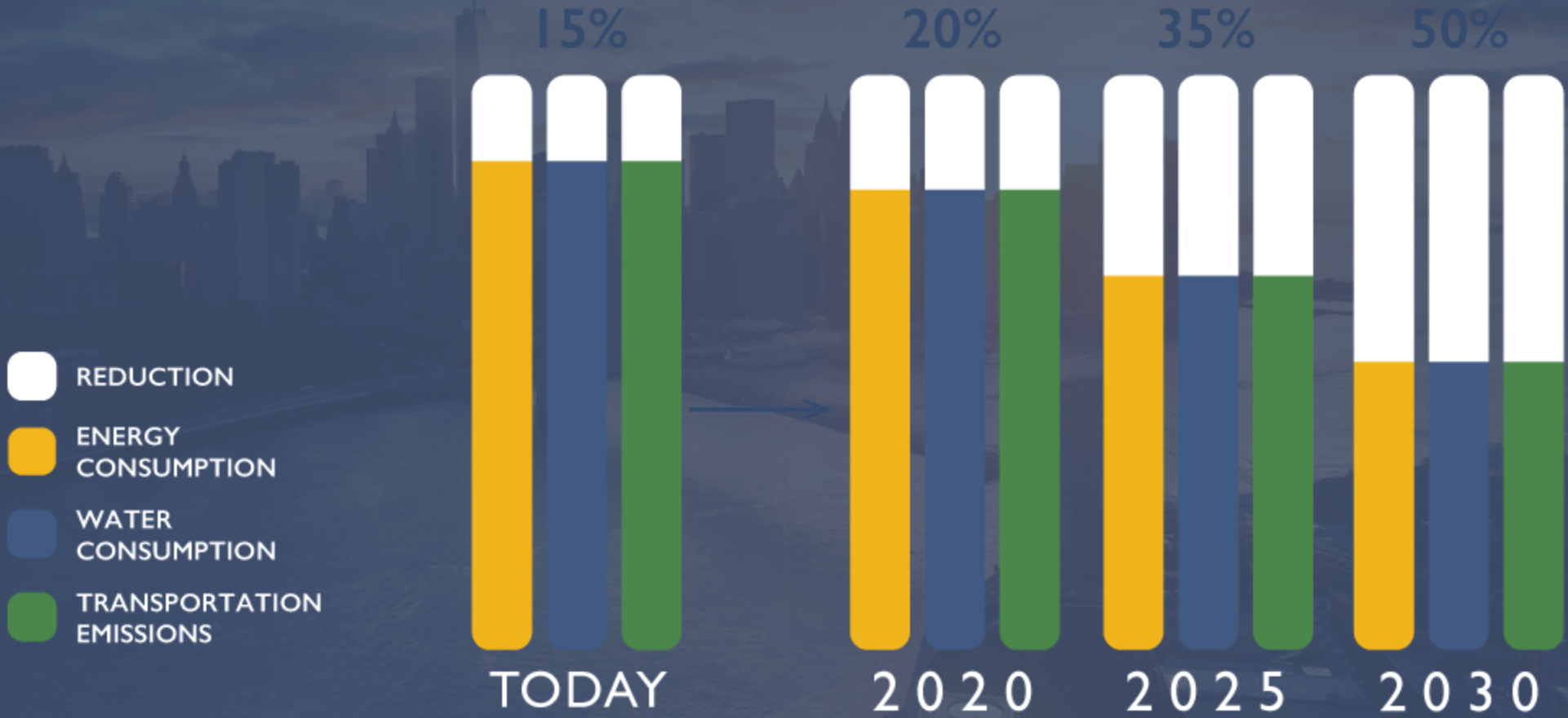
Themes – Beyond Geometry

1. Sustainability more than efficiency and conservation
2. Resiliency + Health
3. Strategies + Evidence-based Design
4. Design + Construction + Operations
5. Community Input
6. Engagement with Stakeholders + Existing Infrastructure
7. Goals-driven
8. Friendly Competition
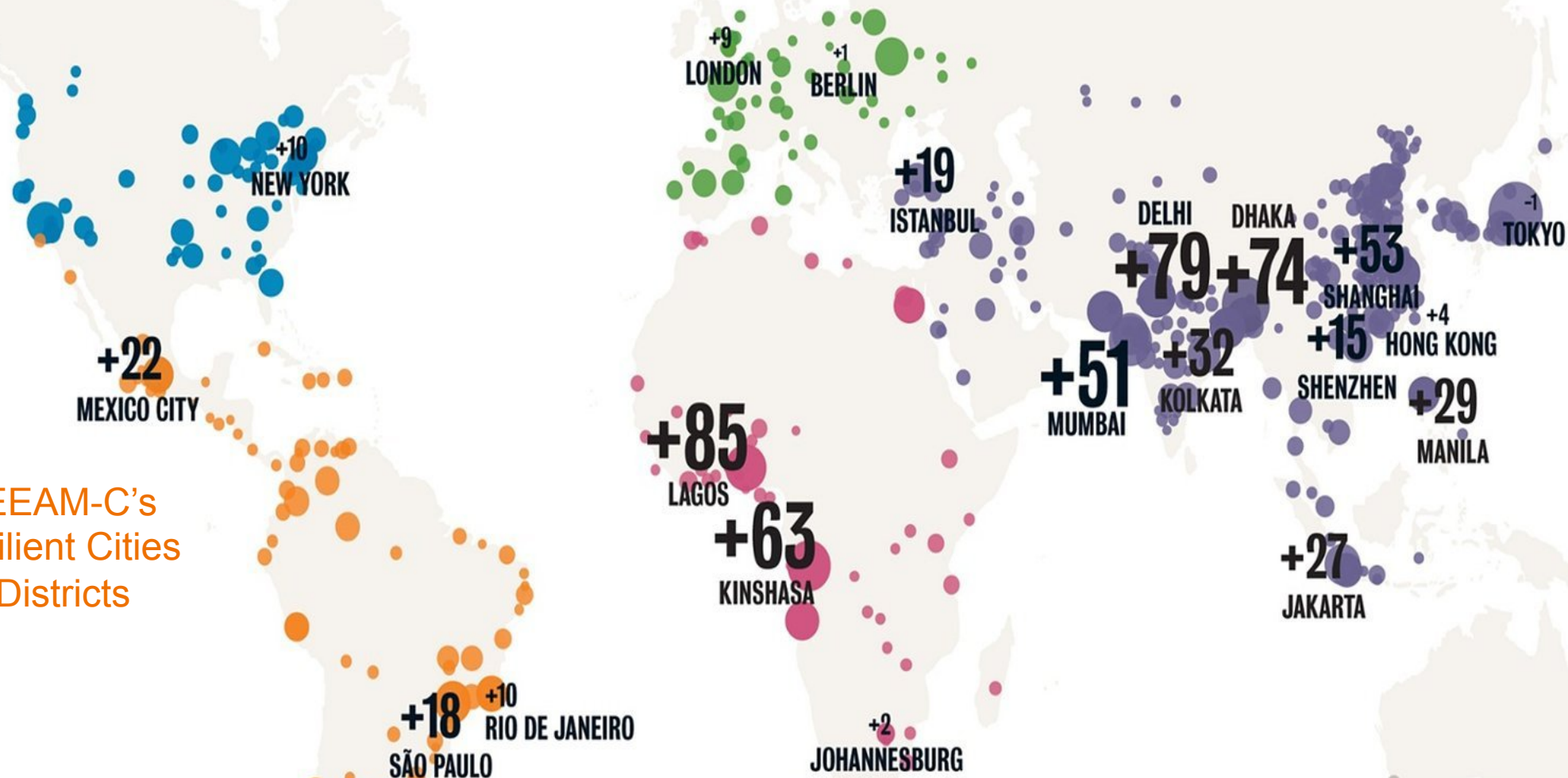9. Scalable Along a Spectrum of Potential and Time
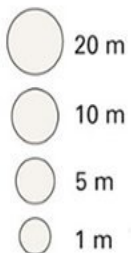10. Accountability

RURAL

URBAN

URBAN GROWTH PER HOUR

1 of 49 BREEAM-C's
4 of 100 Resilient Cities
2 of 149 EcoDistricts

+9 LONDON
+1 BERLIN
+19 ISTANBUL
+10 NEW YORK
+22 MEXICO CITY
+85 LAGOS
+63 KINSHASA
+2 JOHANNESBURG
+79 DELHI
+74 DHAKA
+53 SHANGHAI
+32 KOLKATA
+51 MUMBAI
+15 SHENZHEN
+4 HONG KONG
+29 MANILA
+27 JAKARTA
-1 TOKYO
+18 SÃO PAULO
+10 RIO DE JANEIRO

Population
20 m
10 m
5 m
1 m

Regulate Planners: Development rights over social engineering, then tightly define planning scope to access/traffic, infringements on neighbours, heritage, and pollution.

Abolish land use prescriptions: The market should allocate land uses, so more residences can come in until the right balance with work and entertainment is discovered.

Stop all vain and unproductive attempts at "milieu protection"

Abolish prescriptive housing standards: Planners and politicians should stay away from housing standards. Here too the market has the best chance to discover the most useful, productive and life/prosperity-enhancing mix. They protect nobody and eliminate choice. All subsidized goods are oversupplied and thus partially wasted.

Abolish social & affordable housing: No more imposition of affordable housing quotas, phase out and privatise all council housing, phase out the housing benefit system (substitute with monetary support without specific purpose allocation).

Abolish government home ownership subsidies: This distorts real housing preferences and biases against mobility.

Abolish rent control & tenancy regulation: Allow free contracting on tenancy terms and let a thousand flowers bloom, creating a dense, urban fabric that delivers stimulating urbanity our post-Fordist society desires.

Privatise streets, public spaces and possibly whole urban districts