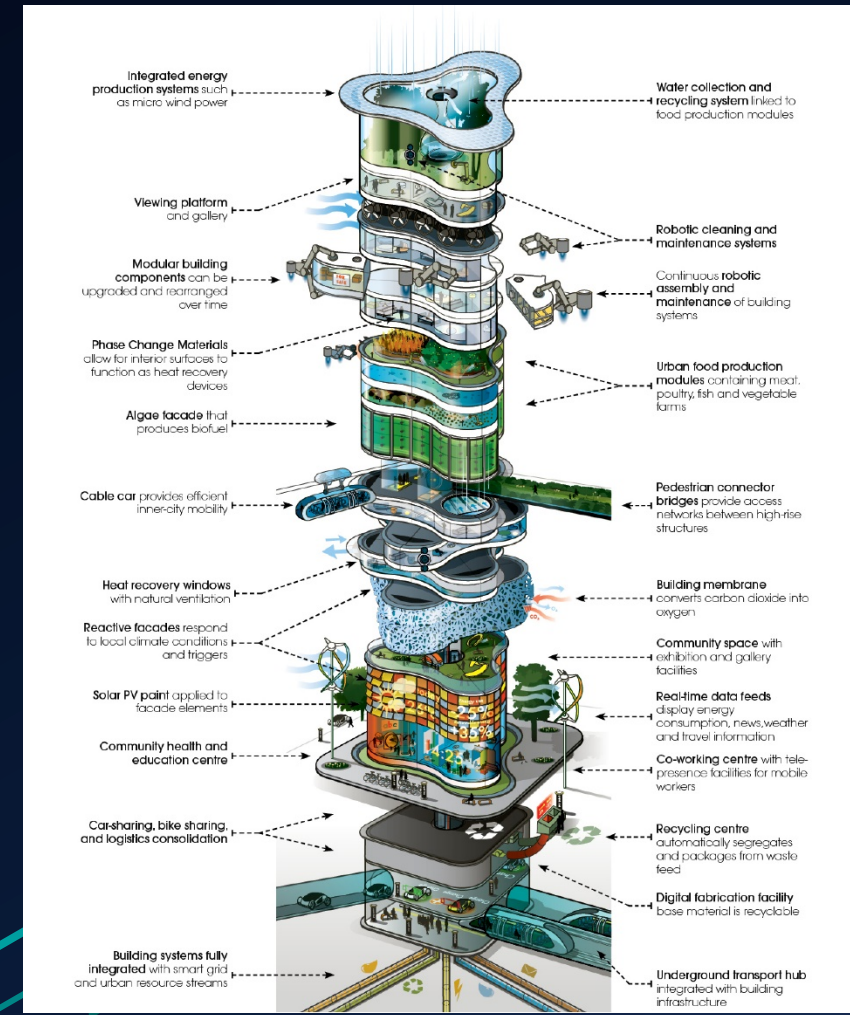
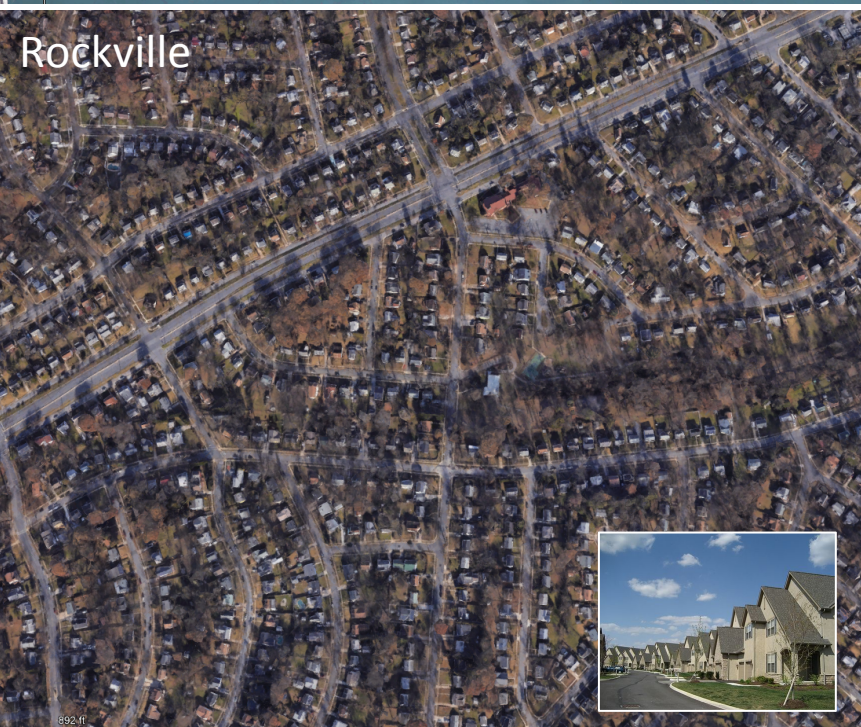


The Future of Urbanism

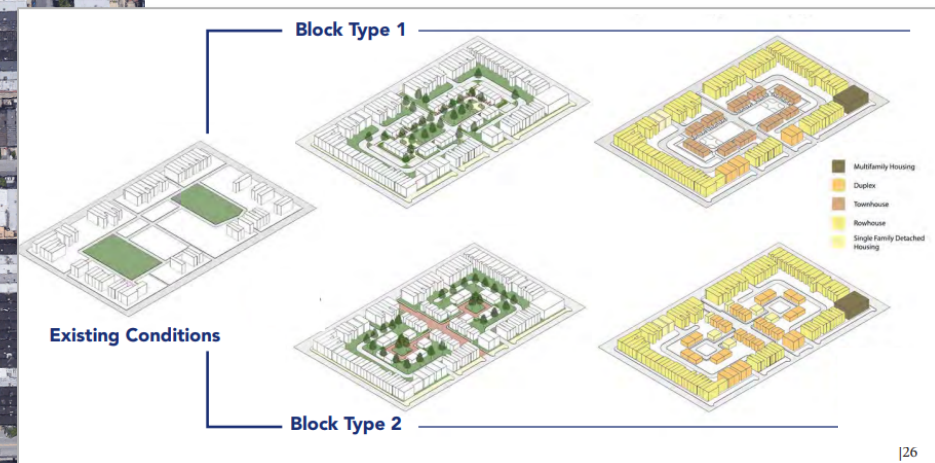
WHERE ARE WE GOING
AND
HOW DO WE GET THERE?





Equity and Urban Form

Matthew Bell FAIA
mattbell@umd.edu



“Five Options for Harlem Park” (ARCH 700)



Managing the Magic of Urban Places:

An Unauthorized Discourse on Built Heritage Conservation

Jeremy Wells, Associate Professor, HISP

SECTION 7:

Architectural Classification

Yes No NA

Bulletin 16 Terminology [pp. 25-26]

Materials

Yes No NA

Bulletin 16 Terminology [p. 27]

Building Description

Yes No NA

Setting and Site

Yes No NA

Dates of construction and alteration

Yes No NA

Style

Yes No NA

Size

Yes No NA

Foundation

Yes No NA

Materials

Yes No NA

Roof Shape

Yes No NA

Windows

Yes No NA

Details

Yes No NA

Plan

Yes No NA

Interior

Yes No NA

Yes No NA

If altered, has impact been assessed

Yes No NA

Classification of C and NC resources

Yes No NA

ALL resources classified

Yes No NA

Rationale discussed for C and NC Status

SECTION 8:

Yes No NA

Criteria Checked [pp. 35-39]

Yes No NA

If "B" check Significant Person Blank-Format: last name, first

Yes No NA

If "D" check Cultural Affiliation Blank

Criteria Considerations

Yes No NA

Discussed in text?

Criteria Considerations/Exception Checked

Yes No NA

If so, which exceptions?

Area of Significance

Yes No NA

Bulletin 16 Terminology [pp. 40-41]

Yes No NA

Reflects Significance, not just use

Period of Significance (POS)

Yes No NA

POS is correct and does not predate resource

Yes No NA

POS is correct by using the date of first

contributing resource

Yes No NA

POS is correct and does not postdate 50 yrs

Or justification for extension

Yes No NA

POS is discussed in text or footnoted

Significant Date

Yes No NA

Significant Date Listed

Yes No NA

Discussed in text? OR

What is nature's value?

How does nature benefit human well-being especially in urban settings?

Total Economic Value of nature includes seen and unseen benefits.

Mispillion Riverwalk Greenway - Value of park leisure activities **\$480,000 – \$1.23 million** and **\$1.07 million per year** in direct spending associated with Riverwalk events.



**ENVIRONMENTAL
FINANCE CENTER**

Jennifer M. Egan, PG, PhD

The Pew Charitable Trusts commissioned this project. Pew is not responsible for errors within and does not necessarily endorse the opinions and conclusions herein.



SMALL
BUSINESS

Anti-Displacement Network

Dr. Willow Lung-Amam, Director
Nohely Alvarez & Bi'Anncha Andrews
www.antidisplacement.org
@SBANinPlace



What Do We Do

Small Business Resources: scholarly research, brown papers, small business and gentrification data

Communication: website, social media, newsletters, LinkedIn and Slack

Anti-Displacement Working Groups: Bimonthly meeting of network members to develop innovative and effective anti-displacement strategies.

Case Studies: Teams of SBAN members that conduct in-depth analyses of promising policies and practices.

Convenings: webinars and national convening of members focus around working sessions about strategy development and deployment.

What is SBAN?

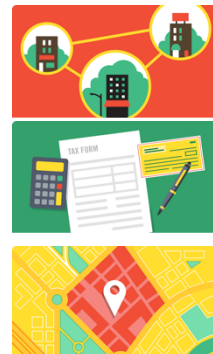
Mission: To establish and sustain a network of organizations that work to prevent the displacement of small businesses owned by immigrants and people of color in gentrifying neighborhoods.

Vision: Vibrant neighborhoods anchored by diverse business owners, workers, and residents who can remain in place and benefit from new public and private investments

Members: 110 organizations from 12 targeted metropolitan areas, including national/international organizations.

Stakeholders: Technical assistance providers, community-based & nonprofit organizations; real estate & development firms; academic & research institutions; government agencies; small business associations; banking & lending institutions

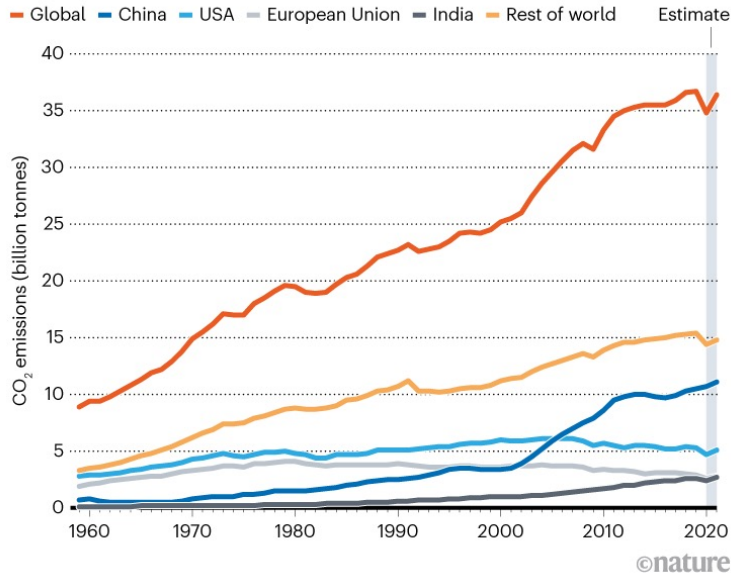
What We've Found



- **Commercial Property and Community Ownership** (ex: cooperatives and community land trusts)
- **Commercial Tenant Protections** (ex: rent stabilization and legacy business programs)
- **Zoning and Form-Based Codes** (ex: store cap sizes and formula business ordinances)

2022 Researcher and Practitioner Forum: The Future of Urbanism
(University of Maryland, MAPP)

INCREASE



The global annual GHG emissions from the building sector in 2020 were nearly 2.9 gigatonnes.

GROWTH



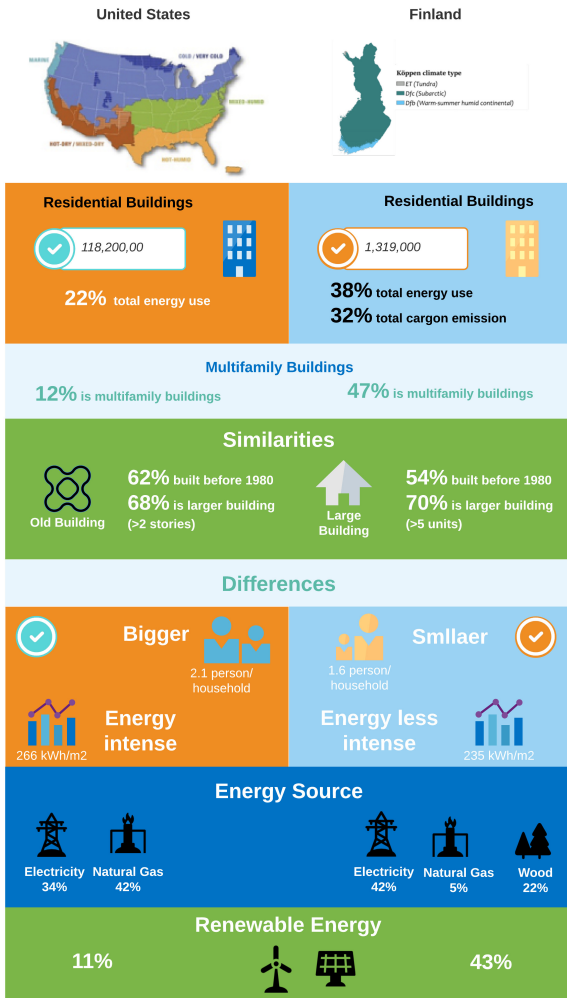
Globally, floor area equivalent to the surface of the city of Paris is added every week through 2050.

Ming Hu
Associate Professor
mhu2008@umd.edu

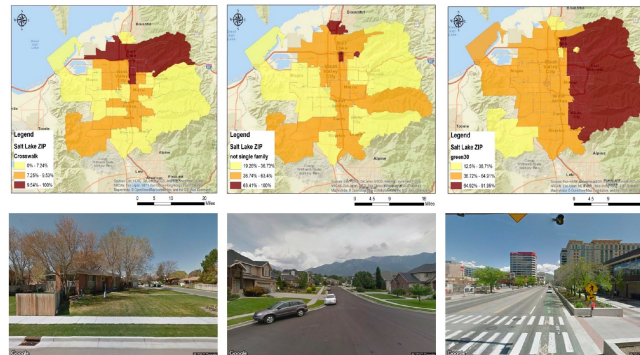
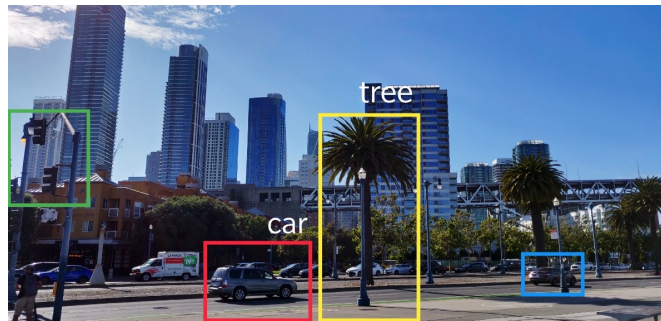


BUILT SMARTER

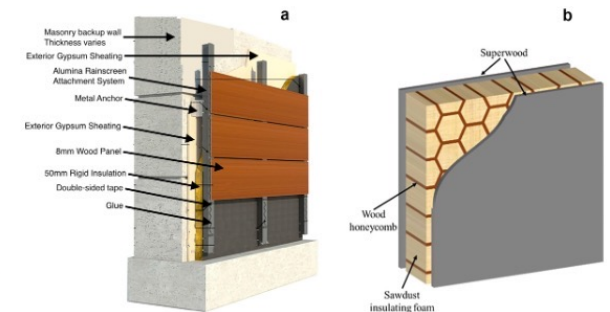
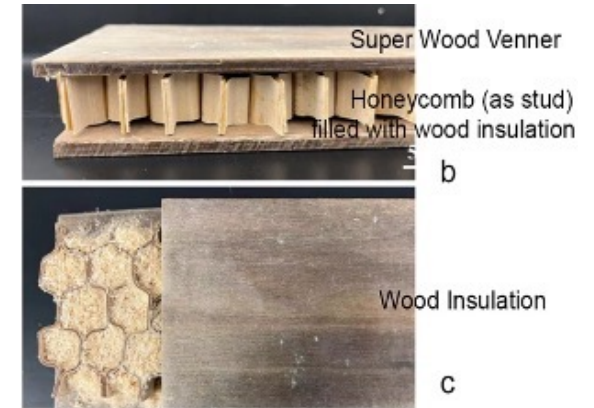
Built4Climate Built4Health Built2Last



Project 1 Built4Climate



Project 2 Built4Health



Project 3 Built4Last



Playful Learning Landscapes: The Public Realm & The Digital Window

Ronit Eisenbach, Professor of Architecture
Maryland Creative Placemaking Collaborative

with Profs. Elisabeth Bonsignore, Royce Frances, Cy Keener,
Rikkin Thaker, and alum, Michael Mattson.



Library Lanterns, & LightScape Rain Garden, Carroll Avenue/Quebec Terrace

Firefly Learning Landscape, Washington, DC



AEROTROPOLIS 5.0: Vertical Communities

**Aerotropolis
Blueprint
Atlanta**



[aerotropolis-atlanta-blueprint-final.pdf](#)
[aerotaatl.org](#)

**Convergent
Program
Halo**



Image courtesy of James Tilghman AIA.

**Vertical
Community**



Hong Kong Pixel Homes Competition 1st Prize Kwong Non Ginow/ Terry Lukasing - towers within a tower. Courtesy of Bee Breeders

**Near Future
Autonomous
Mobility**



*Image courtesy of Volocopter
Urban air mobility pioneer Volocopter*

**AR/VR
Technology/
Immersive
Environments**



*Steps to Sustainable Community Building.
" Social Change Central, May 5, 2019.*

Exploring the Impact of Near Future Mobility and Convergent Programming on the potential for enhanced Community Definition and Performance in moderate to high density urban environments..... College Park Discovery District.....Baltimore Locust Point.....Equitable Access and Governance....Convergence of Research/Commercial Enterprise....Experience Destination Design...Bio-Climatic Production..... Wellness and Spiritual Space...Immersive Environments.... Near Future Food Production.....

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SCHOOL OF
ARCHITECTURE,
PLANNING & PRESERVATION

Parametric Modeling for the Future of Urbanism

Joseph Williams, Ph.D.
Asst. Prof. of Architecture

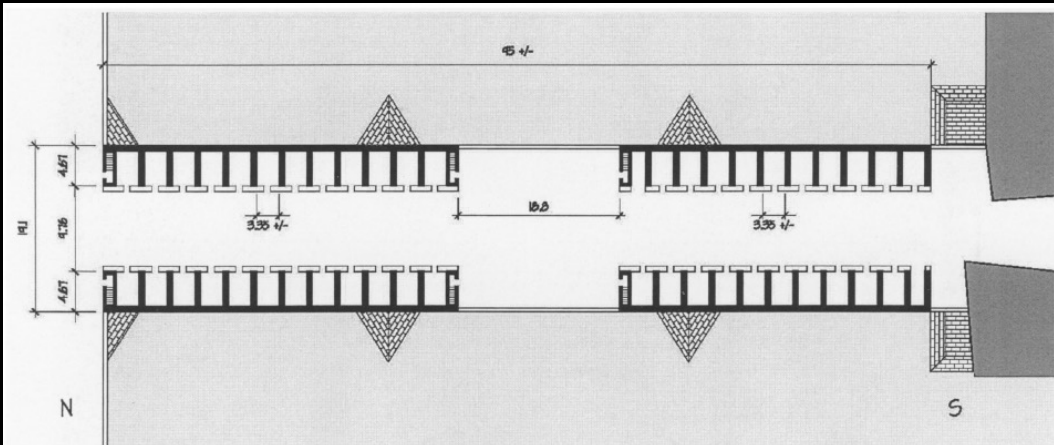
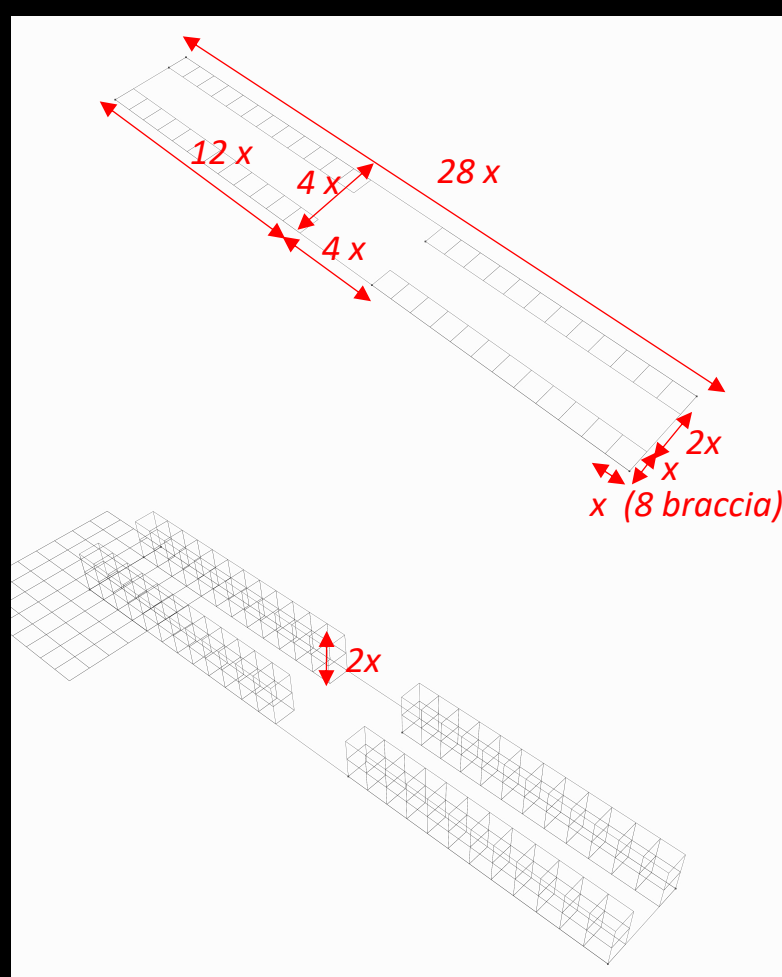


FIGURE 8. Ponte Vecchio, plan as built with dimensions in meters (reconstruction: author, drawing: Cecelia Hallahan).

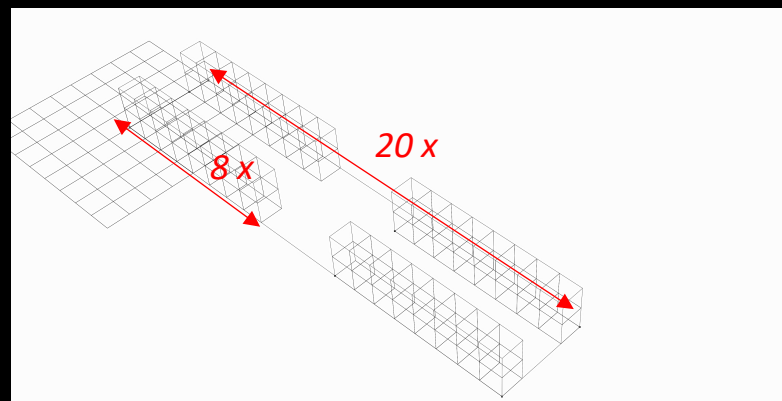


Florence, Italy. Ponte Vecchio. 14th century.

Top-left: General view.

Bottom-left: Plan.

Top-center: Author's parametric model of ideal geometry given by architect Villani.



Bottom-center: Parametric model with theoretical adjustment to a narrower river span.



Chengri Ding, Ph.D.

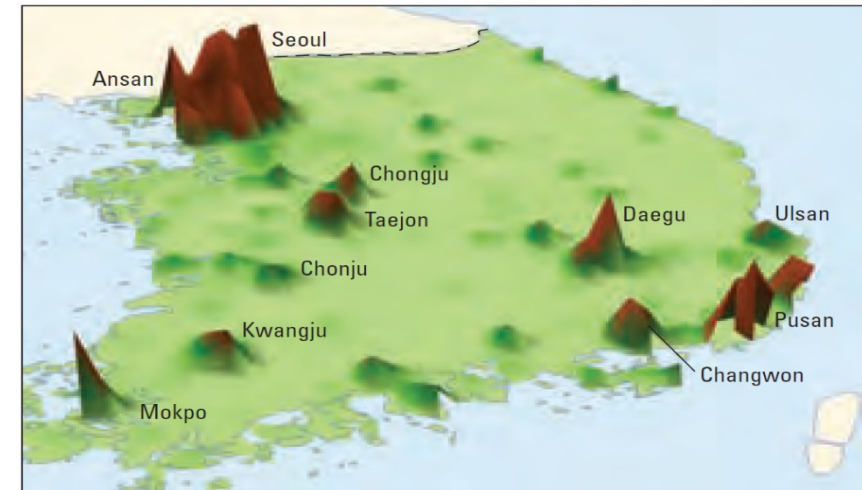
Professor of Urban Studies and Planning

cding@umd.edu; Ph: 301-405-6626

Megacities lead the fight against climate change

Reducing emissions in a few of the world's most populous cities could have an outsized impact on climate change.

Just 25 mega-cities produce 52% of the world's urban greenhouse gas emissions.



Source: WDR 2009 team and World Bank Development Research Group, based on subnational GDP estimates for 2005. See also Nordhaus 2006.

Urbanization and Megacities in New Millennium: Challenges and Opportunities

Year	Megacities	Challenges	Opportunities
1990	10 m	<ul style="list-style-type: none"> Congestion 	<ul style="list-style-type: none"> Advantages in the economy, technology, and human capitals
2014	28 m	<ul style="list-style-type: none"> Natural disasters <ul style="list-style-type: none"> Flooding Water shortage 	<ul style="list-style-type: none"> Home of innovations
2030	41 m	<ul style="list-style-type: none"> Pollution Urban environment Urban slums/informal settlement Global climate impact 	<ul style="list-style-type: none"> Poverty reduction Multi-discipline approaches

Largest megacities

Tokyo 37.5 m

More to emerge in developing countries



The Future of Urbanism and the Multidimensionality of the Digital Age: Sensing, Community Science, and Virtual Auditing Toward Infrastructure Resilience and Justice

Dr. Marccus D. Hendricks, Ph.D., MPH
 Director, Stormwater Infrastructure Resilience and Justice (SIRJ) Lab



"...Climate change is not the single cause of catastrophe, however it is widening the expanse of vulnerability and damage, particularly at the intersection of hazards (e.g. urban flooding) and the human-built environment..."

Sensing: Technological Innovation



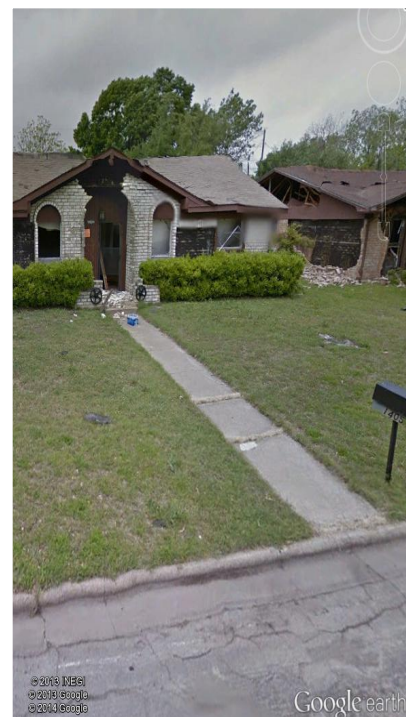
- Problem: Lagged, intermittent data
- Continuous, real-time event monitoring
- Big data analytics
- Water quantity and quality data
- Establish BMPs and inform sustain develop

Community Science: Social Innovation



- Problem: Incomplete data; lacks nuance
- Timely, complete, and current data
- Inform risk analysis and capital planning
- Community stake, control, and agency

Virtual Auditing & Photography: Practical Innovation



- Problem: Aggregated cross-sectional data
- Low-tech, accessible, and digestible
- Parcel-level data
- Trackable by residents, planners, and researchers

Purple Line Corridor Coalition:

Coordinated action for equitable development

Affordable Housing ✨ Small Businesses ✨ Workforce Development ✨ Vibrant Communities

Research highlights

- PLCC work has informed academic articles, dissertations, books
 - Eg., Nick Finio; Qiong Peng; Willow Lung-Amam; Casey Dawkins, Gerrit Knaap
- Design and architecture projects, community-engaged student projects
 - Eg., Ronit Eisenbach, Matt Bell
- Upcoming research partnership with Howard University's Center for Excellence in Housing and Urban Research and Policy (CHURP) on gentrification and displacement
- Contact Nick Finio, Associate Director of NCSG, for research questions: nfinio@umd.edu