



**NUREC** National Urban  
Research & Extension Center

Webinar

# Built Environment Rx: Healing Urban Systems through Design, Policy, and Practice

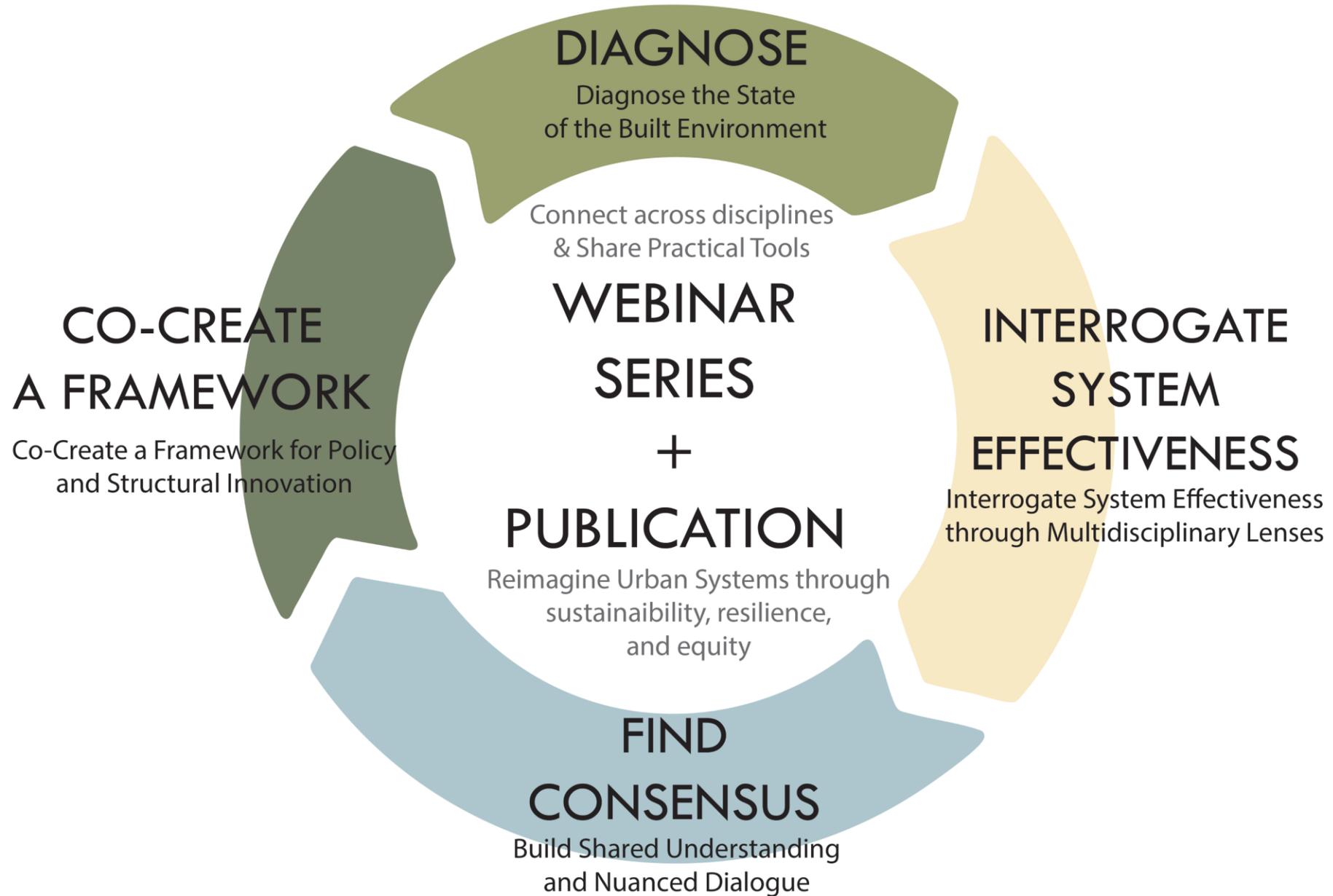
*Webinar Series Kick-Off*



**Date :**  
15 July, 2025



**Time :**  
10am - 11:30am PDT





Source: DGB Group



## Webinar Dates

(2nd Tuesdays, 10–11:30 AM PT)

**July 15** – Provisioning Services & Urban Resilience

**August 12** – Regulating Services & Climate Adaptation

**September 9** – Supporting Services & Biodiversity in Cities

**October 14** – Cultural Services & Community Well-being

**November 11** – Tools, Metrics, & Research in Practice

Register:



# AGENDA

July 15, 10:00 - 11:30 am PDT (1:00 - 2:30 pm EDT)

1. *Introduction to Series and Lecturers*: 10:00 - 10:15 (PDT)
2. *Lecture*: Sustainable Urban Design Framework: Professor Nico Larco: 10:15 - 10:45
3. *Lecture*: Food in the Built Environment: Professor Matt Potteiger: 10:45 - 11:15
4. *Q&A*: 11:15 - 11:25
5. *Closing and Next Steps*: 11:25 - 11:30



SURVEY Link: <https://arcg.is/18yf0j2>





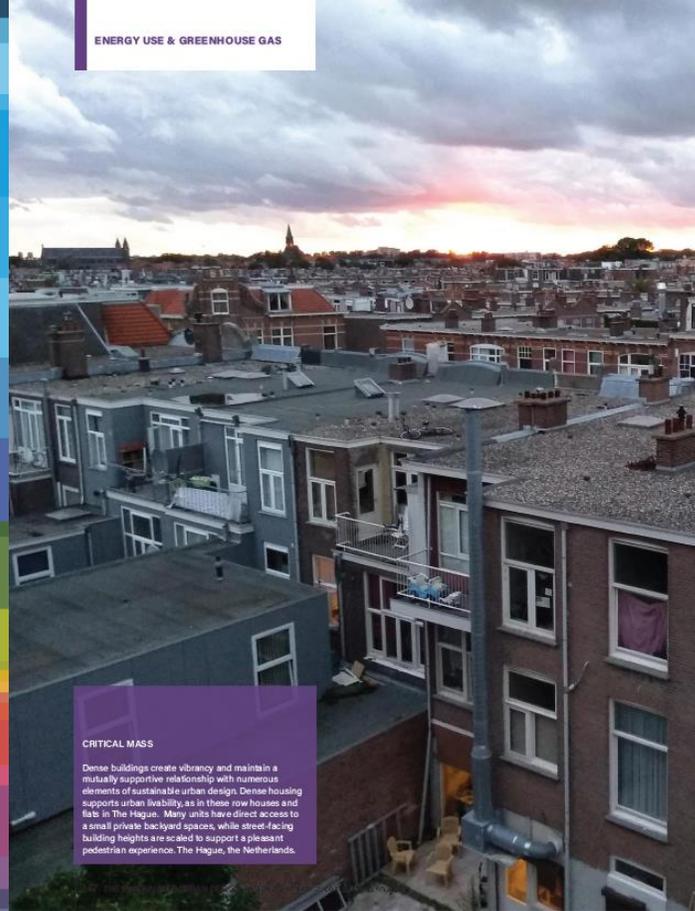
**Built Environment Rx**  
**Provisioning Services and Urban Resilience**  
Guest Lecturer: Prof Nico Larco  
Architecture Professor and Director of Urbanism Next Center  
University of Oregon

# THE SUSTAINABLE URBAN DESIGN HANDBOOK

Nico Larco and Kaarin Knudson



ENERGY USE & GREENHOUSE GAS



#### CRITICAL MASS

Dense buildings create vibrancy and maintain a mutually supportive relationship with numerous elements of sustainable urban design. Dense housing supports urban livability, as in these row houses and flats in The Hague. Many units have direct access to a small private backyard space, while street-facing building heights are scaled to support a pleasant pedestrian experience. The Hague, the Netherlands.

DENSE & STREET-ACTIVATING BUILDINGS

1.31

## 1.31 DENSE & STREET-ACTIVATING BUILDINGS

*Building typology and density inform overall urban density and the character of street life*

Building density and typology play a major role in promoting walkable, vibrant, urban environments. Dense building types support transit, multimodal streets, human activity, and local businesses. Mixed-use building types animate the street by incorporating active storefronts, a high degree of ground-floor transparency, and frequent, well-articulated entries.

Dense and street-activating buildings hold the unique capacity to both concentrate and diversify the life along any given street. These buildings often compose the fabric of entire blocks or neighborhoods, but they can also signify incremental reinvestment in an area as new infill development. Designers need to understand how these buildings can respond to existing neighborhood character, improve the public realm, and employ context-sensitive design while increasing density.

**MEASUREMENT**  
Density and activity facing the street are key measures of a building's potential for street activation.

**Density**  
Measured by dwellings per acre (or hectare), bedrooms per acre, or people per acre, among others. Density provides a sense of potential street activity and commercial demand.

**Building Type Mix**  
Measurement of the amount of each category of building types in an area (e.g., detached housing, apartments, high-rise towers, etc.).

**Street-Facing Program**  
As a gauge of activity and/or commercial visibility. Measured in a ratio of linear feet (or meters) of active, street-facing program compared to total street frontage.

#### RELATED URBAN DESIGN ELEMENTS

**INFLUENCED BY**  
1.21(A)(2) High Density Zoning & Platting  
Density needs to be allowed so that denser building types are possible.

1.22 District-Scale Parking Mpt & Design  
High minimum parking ratios often force low density building typologies that do not engage the street.

1.23 High District Land Use Mix  
Mixed-use supports a range of buildings and uses to activate the ground floor.

1.32 Site-Scale Parking Design  
Parking design often dictates building typology and density.

**INFLUENCES**  
1.11 Robust Transit Networks  
Density creates a concentration of riders and destinations, making transit feasible.

1.30 Pedestrian-Friendly Streets  
Dense and street-activating building are key ingredients of walkable streets.

1.40 Active Street Edges  
Dense and street-activating program make street activation possible.

4.30 Dense & Energy-Efficient Building Types  
Density influences massing and solar exposure, impacting overall energy use.

5.33 Site Design for Community Safety & Inclusion  
Dense, street-engaging buildings bring more activity and more eyes to public spaces, making them feel safer and more inviting.

#### IMPLEMENTATION

**GREENFIELD**  
CORP  
DIFFICULTY

**Low cost and medium difficulty**  
Building types and their densities are often market-driven decisions in greenfield development with zoning limiting some market decisions. In markets that already have successful, dense development, this will be an easy proposition. In markets where dense typologies are unproven, this will be more difficult.

**RETROFIT**  
CORP  
DIFFICULTY

**Medium cost and high difficulty**  
In areas with zoned density restrictions or smaller lots, modifications to enhance density or large-scale street activation may be infeasible or politically difficult.

REGION & CITY

DISTRICT & NEIGHBORHOOD

BLOCK & STREET

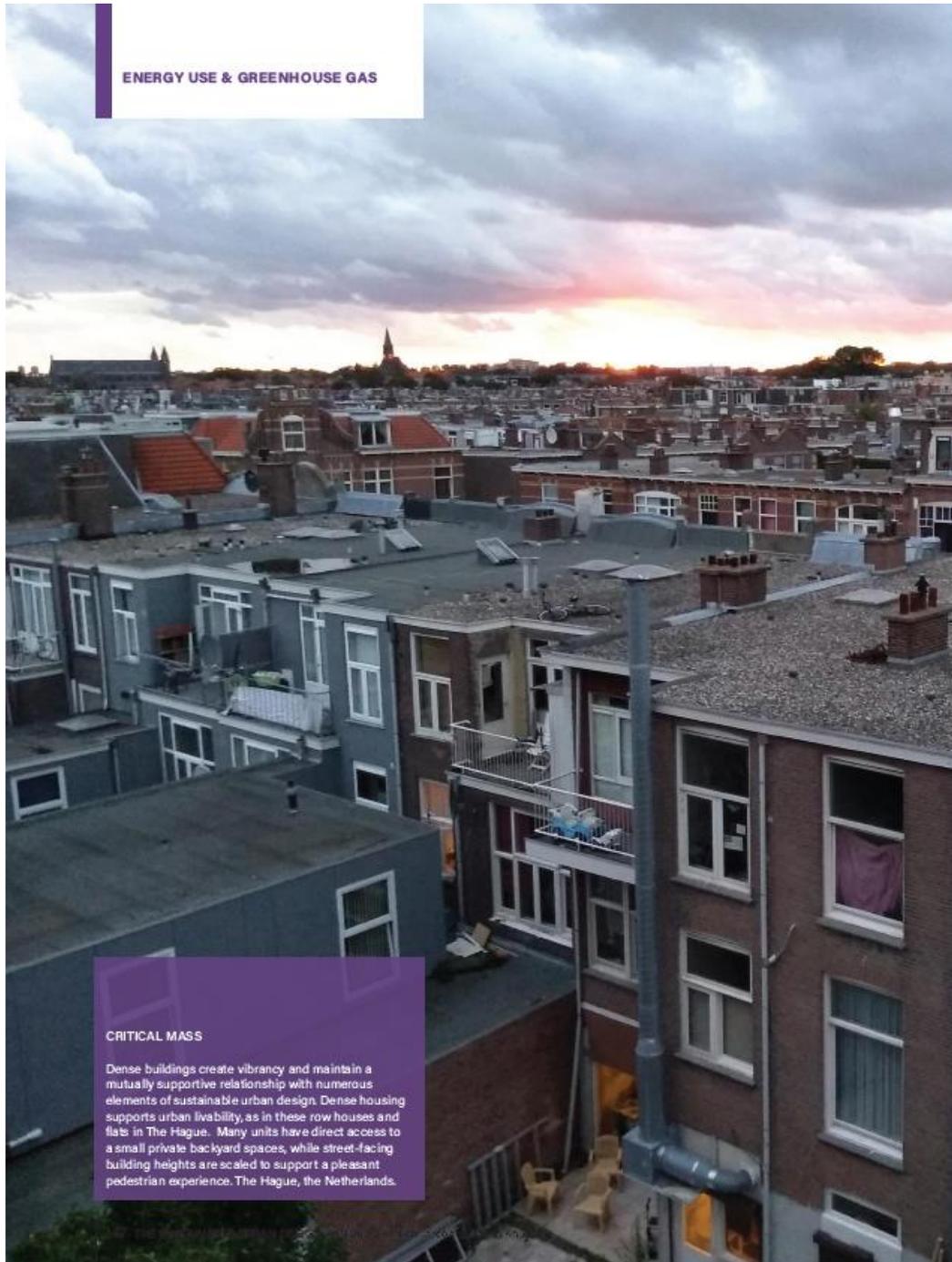
PROJECT & PHASE

[LINK](#)  
[HERE](#)

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## RETROFIT

*Medium cost and high difficulty*

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# SUSTAINABLE URBAN DESIGN FRAMEWORK

## TOPIC AREAS IN URBAN DESIGN Organized by Scale

### 1 Energy Use & Greenhouse Gas

*(Transportation & Land Use)*

### 2 Water

### 3 Ecology & Habitat

### 4 Energy Use & Production

*(Non-Transportation)*

### 5 Equity & Health

	REGION & CITY	DISTRICT & NEIGHBORHOOD	BLOCK & STREET	PROJECT & PARCEL
	<b>1.10</b> Compact Development <i>(For Density &amp; Proximity)</i> <b>1.11</b> Robust Transit Networks <b>1.12</b> Robust Bicycle Networks <b>1.13</b> Balanced Vehicular Networks <b>1.14</b> Regional Land Use Mix	<b>1.20</b> Robust Pedestrian Networks <b>1.201</b> Small & Defined Blocks <b>1.202</b> Street Network Connectivity <b>1.21</b> High-Density Zoning & Platting <b>1.22</b> District-Scale Parking Mgt & Design <b>1.23</b> High District Land Use Mix	<b>1.30</b> Multimodal Street Design <b>1.301</b> Pedestrian-Friendly Streets <b>1.302</b> Bicycle-Friendly Streets <b>1.303</b> Transit-Friendly Streets <b>1.304</b> Limiting Motor Vehicle Impact <b>1.31</b> Dense & Street-Activating Bldgs <b>1.32</b> Site-Scale Parking Design	<b>1.40</b> Active Street Edges <b>1.41</b> High Internal Connectivity <b>1.31</b> Dense & Street-Activating Buildings <b>1.32</b> Site-Scale Parking Design
	<b>2.10</b> Compact Development <i>(For Limited Impact on Natural Systems)</i> <b>2.11</b> Avoid Flood Prone Areas	<b>2.20</b> Robust Stormwater Networks <b>2.21</b> Daylight & Restore Waterways	<b>2.30</b> High Surface Permeability <b>2.31</b> Robust Urban Forest <b>2.32</b> Green Stormwater Infrastructure	<b>2.40</b> Rainwater Capture & Reuse <b>2.30</b> High Surface Permeability <b>2.31</b> Robust Urban Forest <b>2.32</b> Green Stormwater Infrastructure
	<b>3.10</b> Compact Development <i>(For Limited Impact on Natural Systems)</i> <b>3.11</b> Avoid Ecologically Sensitive Areas <b>3.12</b> Robust Ecological Networks	<b>3.20</b> Ecological Corridors & Patches <b>3.21</b> Daylight & Restore Waterways <b>3.11</b> Avoid Ecologically Sensitive Areas	<b>3.30</b> High Surface Permeability <b>3.31</b> Robust Urban Forest <b>3.32</b> Microhabitat Creation <b>3.321</b> High Vertical Complexity <b>3.322</b> Native Vegetation <b>3.33</b> Wildlife Crossings <b>3.34</b> Robust Ecological Area Buffers <b>3.35</b> Limited Light Pollution	<b>3.30</b> High Surface Permeability <b>3.31</b> Robust Urban Forest <b>3.32</b> Microhabitat Creation <b>3.321</b> High Vertical Complexity <b>3.322</b> Native Vegetation <b>3.33</b> Wildlife Crossings <b>3.34</b> Robust Ecological Area Buffers <b>3.35</b> Limited Light Pollution
	<b>4.10</b> Compact Development <i>(For Limited Embodied Energy in Infrastructure)</i>	<b>4.20</b> Street & Block Orientation <b>4.21</b> High-Density Zoning & Platting	<b>4.30</b> Dense & Energy-Efficient Building Types <b>4.31</b> Urban Microclimates <b>4.311</b> Cool & Green Surfaces <b>4.312</b> Robust Urban Forest <b>4.313</b> Street Ht-to-Width Ratio	<b>4.40</b> Infill Development <b>4.30</b> Dense & Energy-Efficient Building Types
	+ See Energy Use & Greenhouse Gas (1.10 - 1.41): To Maximize Access, Affordability, Activity, Safety, and Social Mobility			
	<b>5.10</b> Compact Development <i>(For Proximity, Access &amp; Reduced Infrastructure Cost)</i> <b>5.11</b> Equitable Distribution of Uses & Services	<b>5.20</b> Balanced Block Size <b>5.21</b> High-Density Zoning & Platting <b>5.22</b> Limited Location of Point Source Pollution <b>5.23</b> Mix of Housing Unit Types <b>5.11</b> Equitable Distribution of Uses & Services	<b>5.30</b> Active & Attractive Open Space <b>5.31</b> Robust Urban Forest <b>5.32</b> Affordable Housing Typologies <b>5.33</b> Site Design For Community Safety & Inclusion <b>5.23</b> Mix of Housing Unit Types	<b>5.40</b> Infill Development <b>5.23</b> Mix of Housing Unit Types <b>5.30</b> Active & Attractive Open Space <b>5.32</b> Affordable Housing Typologies <b>5.33</b> Site Design For Community Safety & Inclusion



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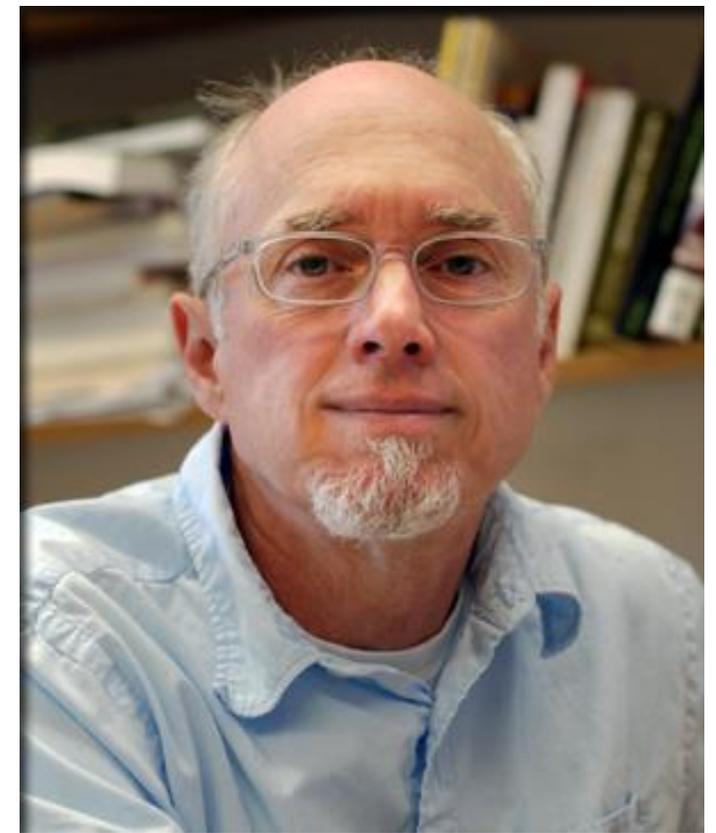
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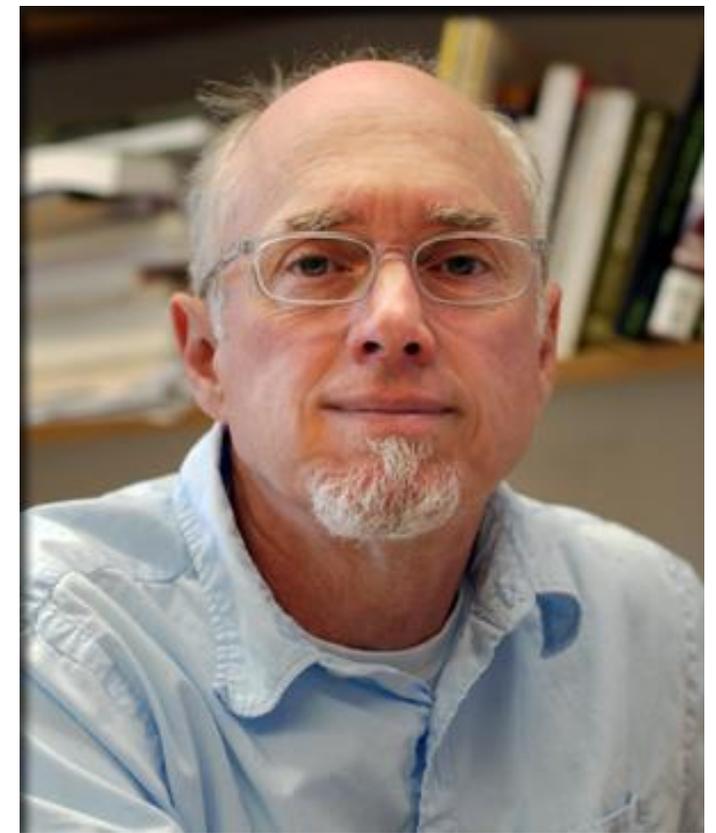
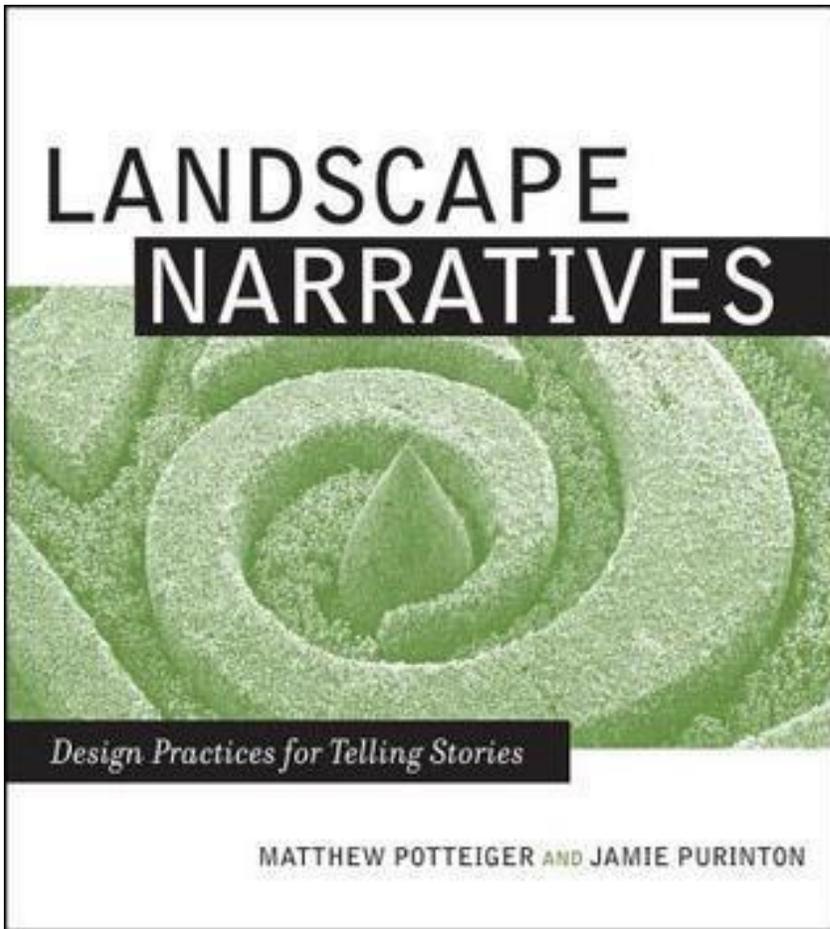


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