Defining and planning for urban green equity

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LARC 444 553
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Learning objectives

1

Articulate the dimensions of green equity

2

Identify strategies used to promote green equity and assess their strengths and weaknesses

3

Describe commonly-used methods to assess distributional equity and the outcomes of such analyses

Urban Green Equity:

Fair access to, and governance of, urban forests regardless of differentiating factors, such as socioeconomic status, racialization, cultural background, or age

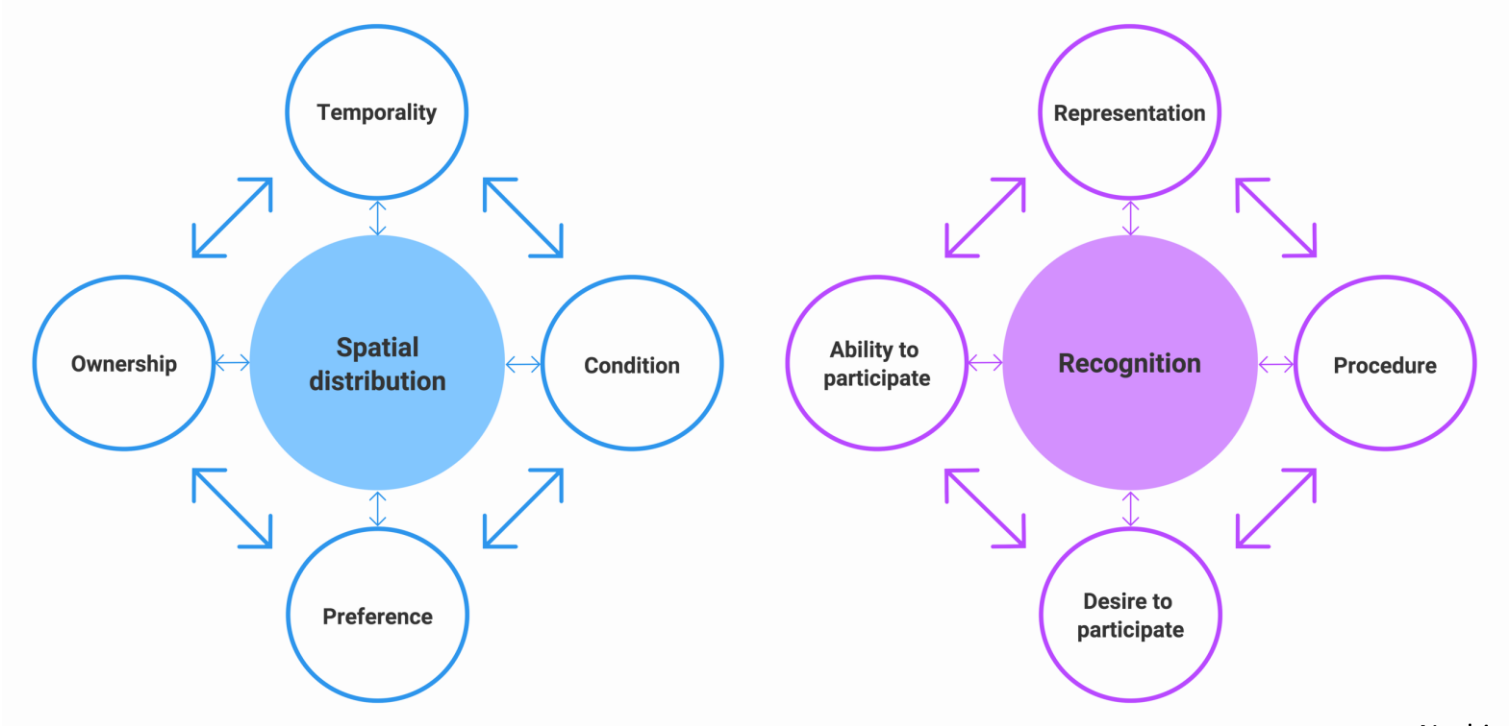
Why does green equity matter?

3.7 billion people
CO_2 sequestration
increased property values and community investment
climate change adaptation
reduced air pollution
shade
emotional health
lower stress
improved attention
reduced flooding
recreation
increased biodiversity
physical health

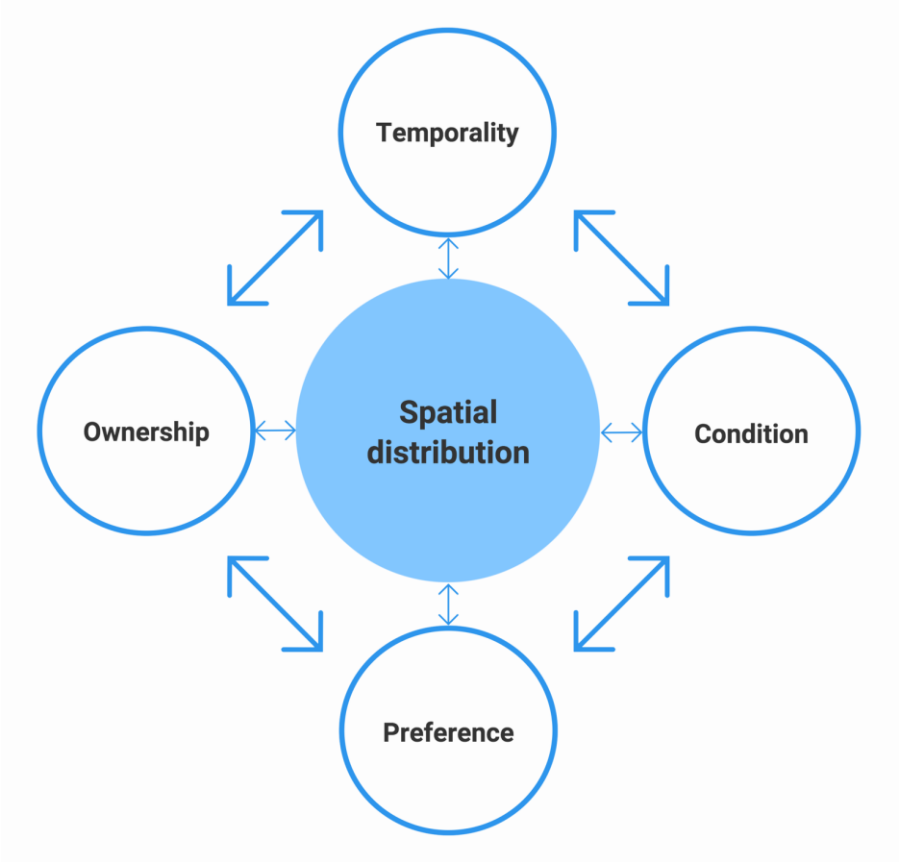
Dimensions of urban green equity

What dimensions provide a common framework for urban green equity analyses?

Dimensions of urban green equity



Nesbitt et al. (2018)
Urban Forestry & Urban Greening



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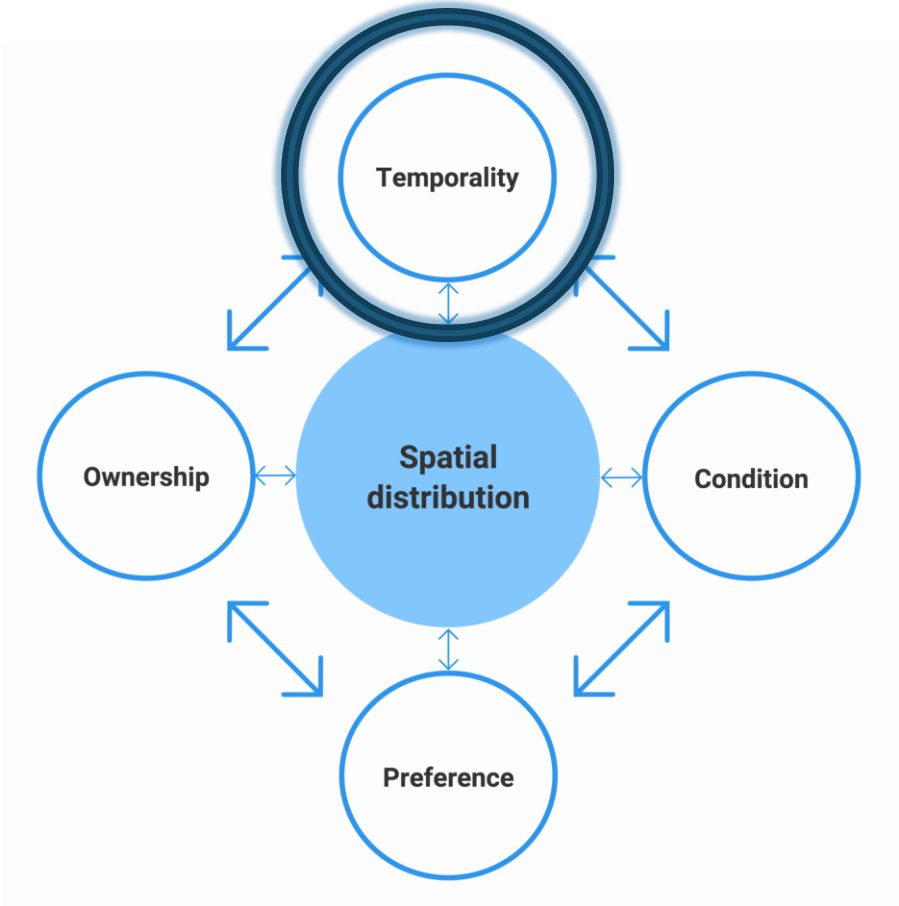

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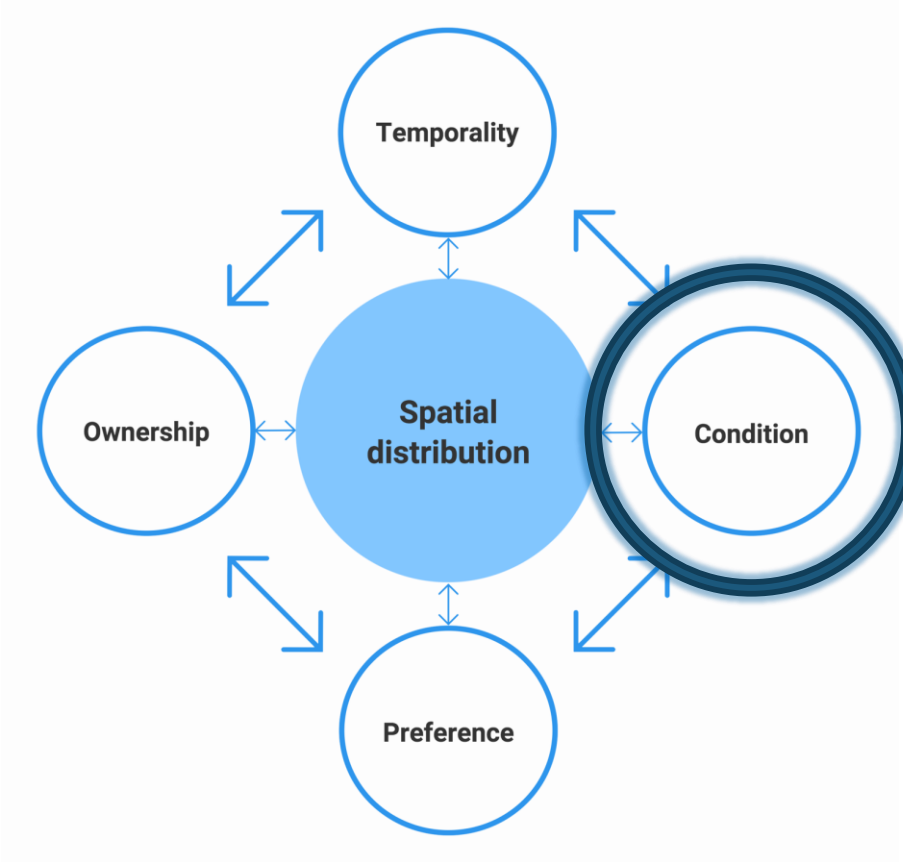

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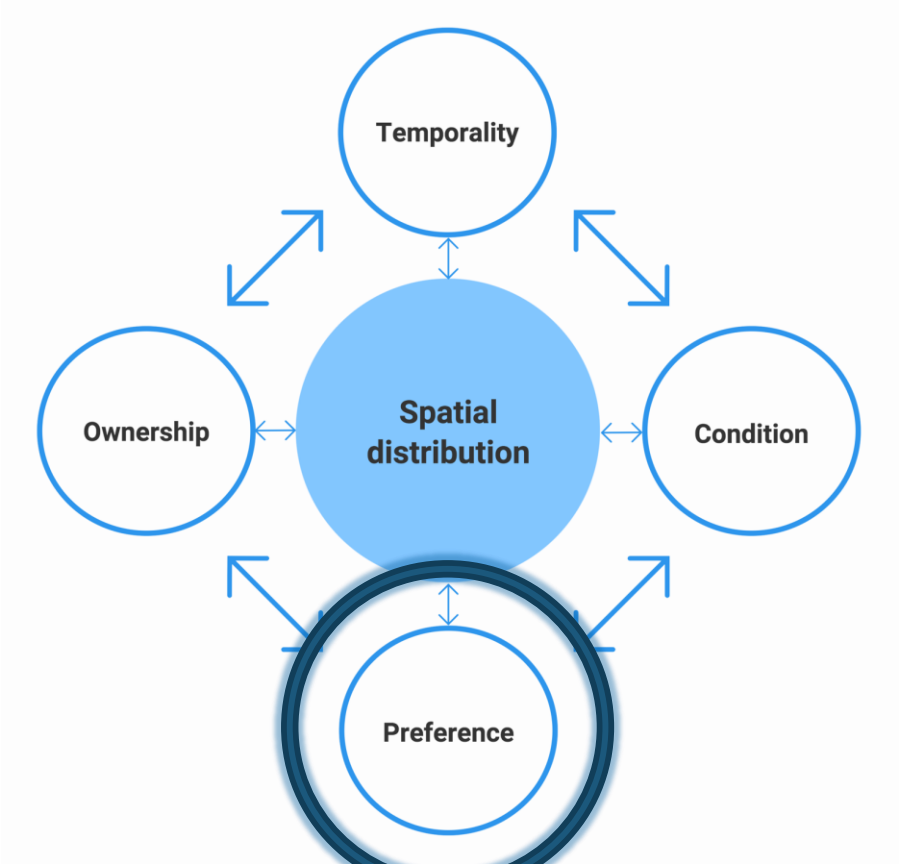

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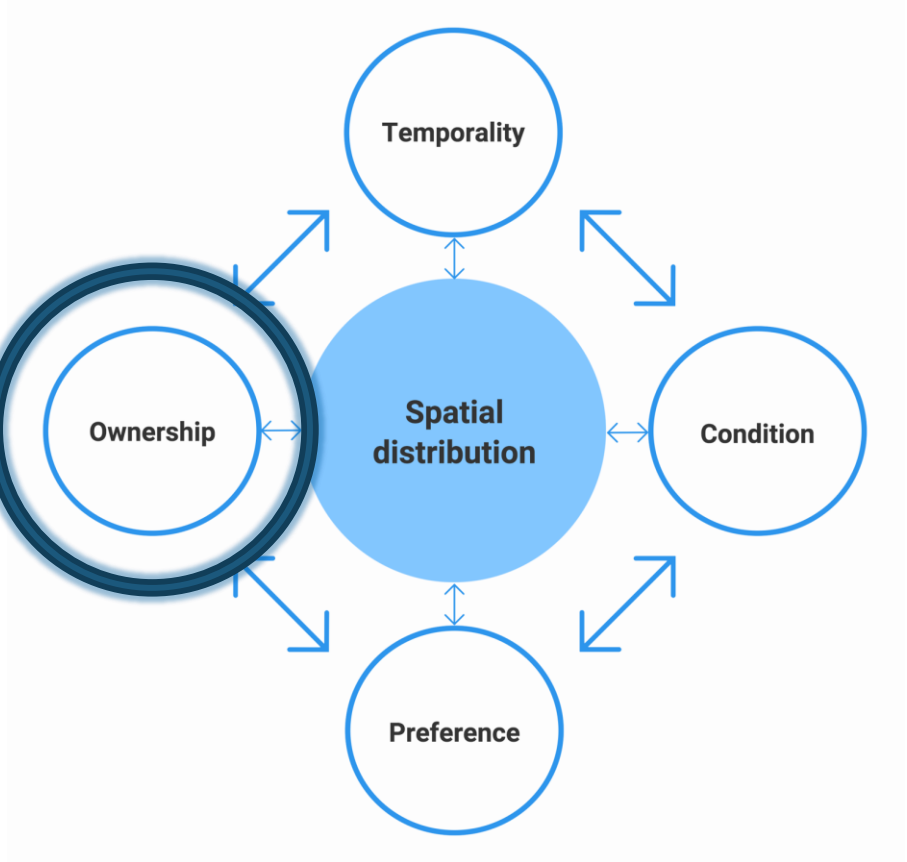

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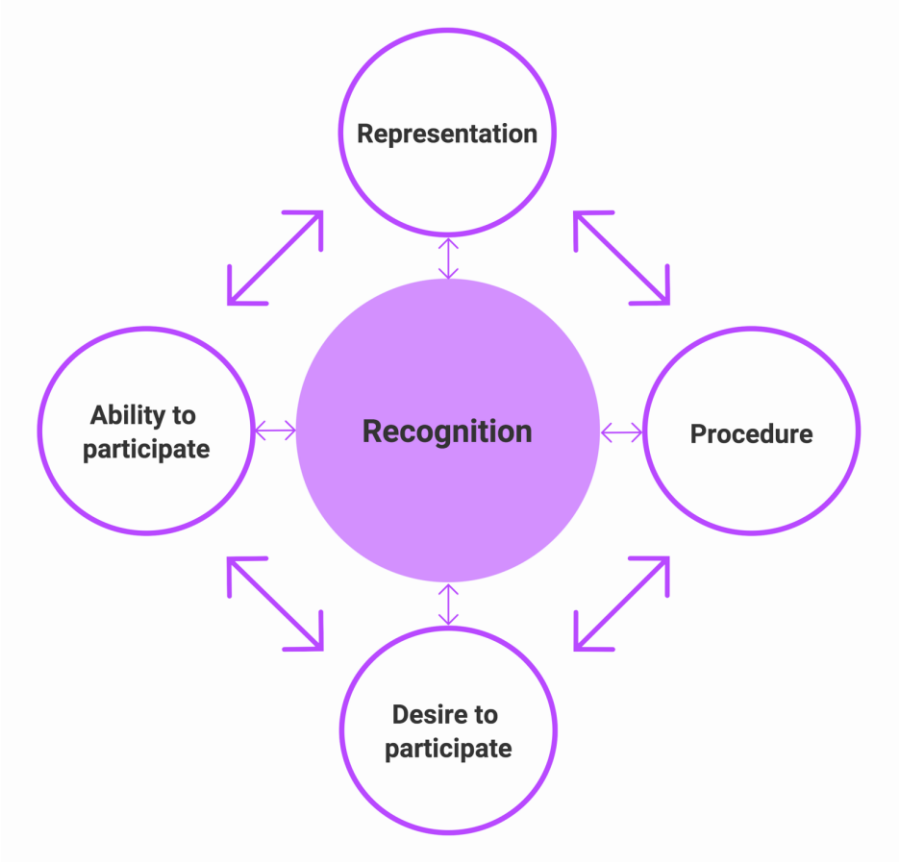

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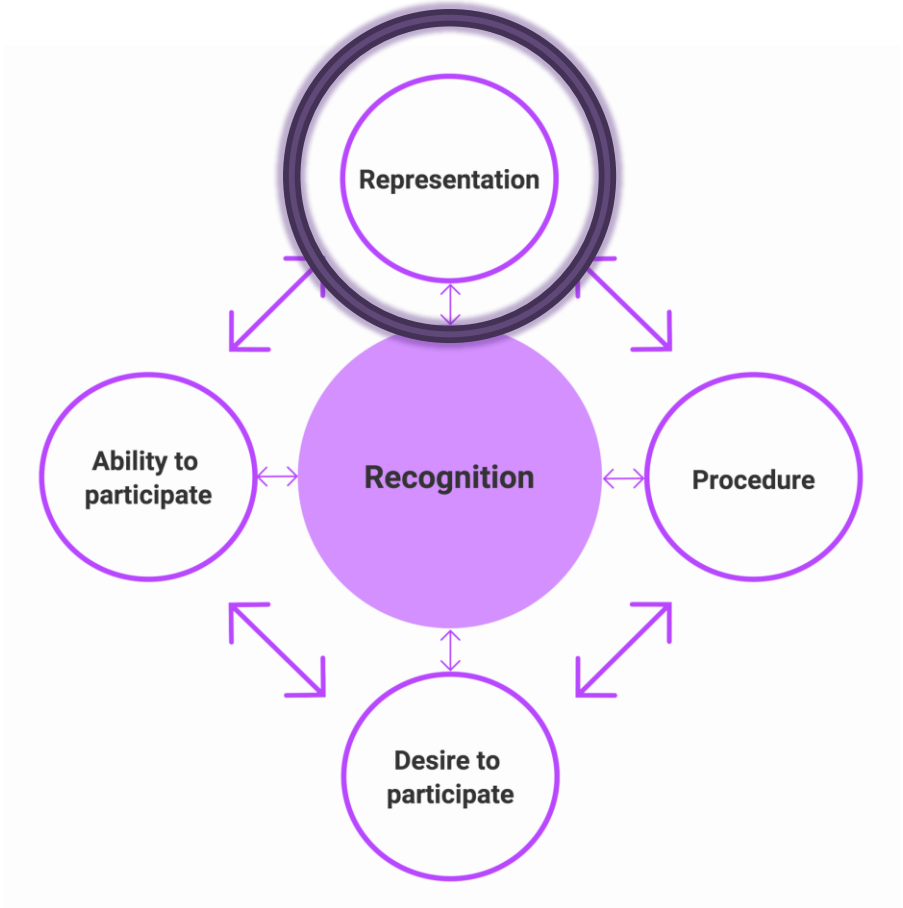

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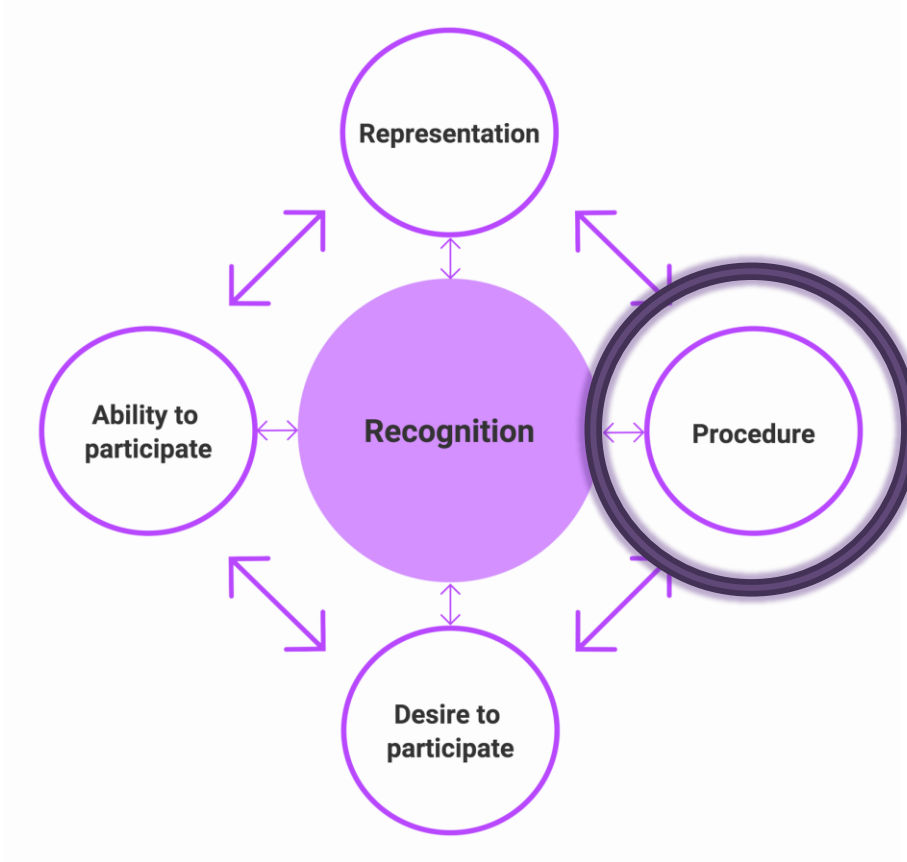

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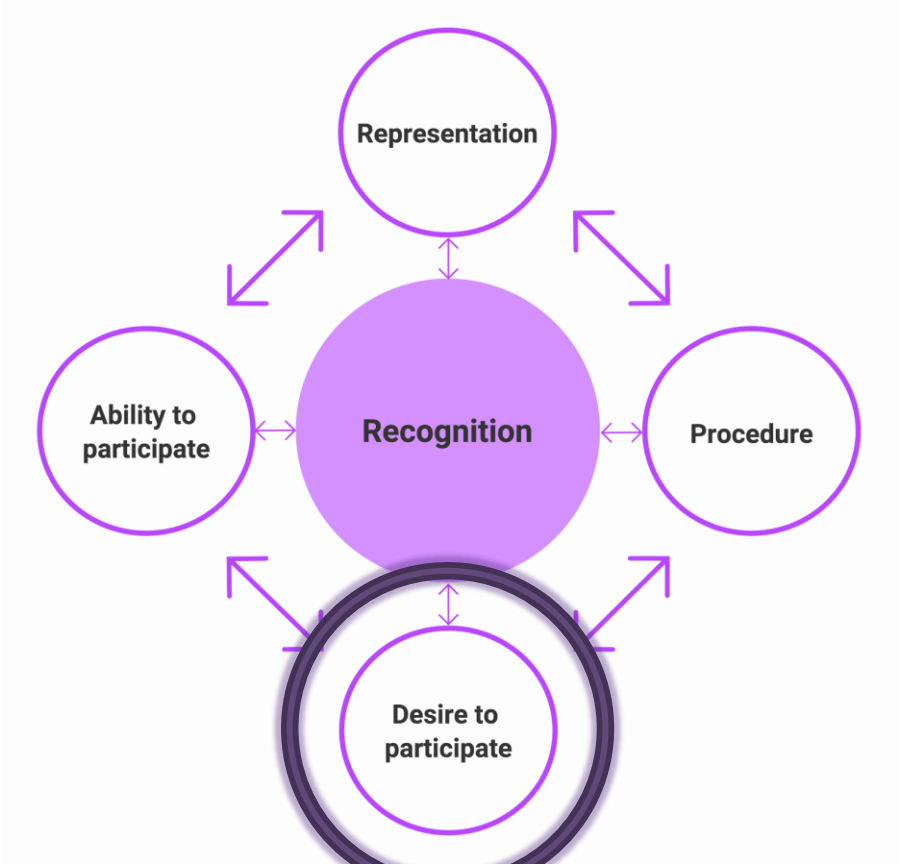

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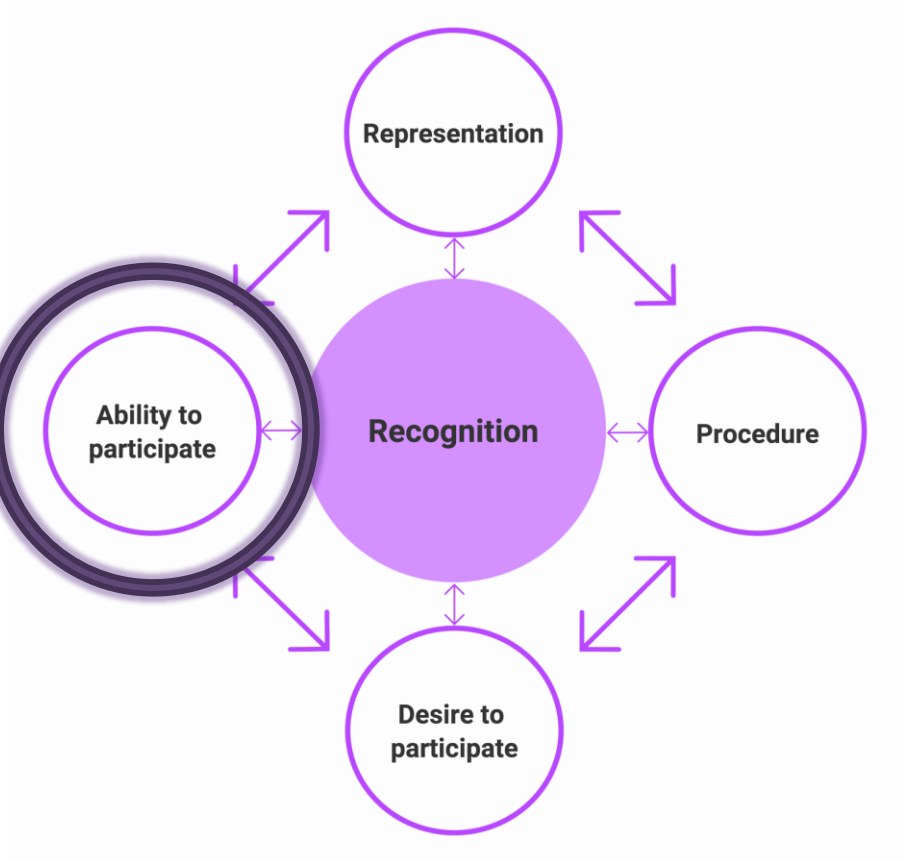

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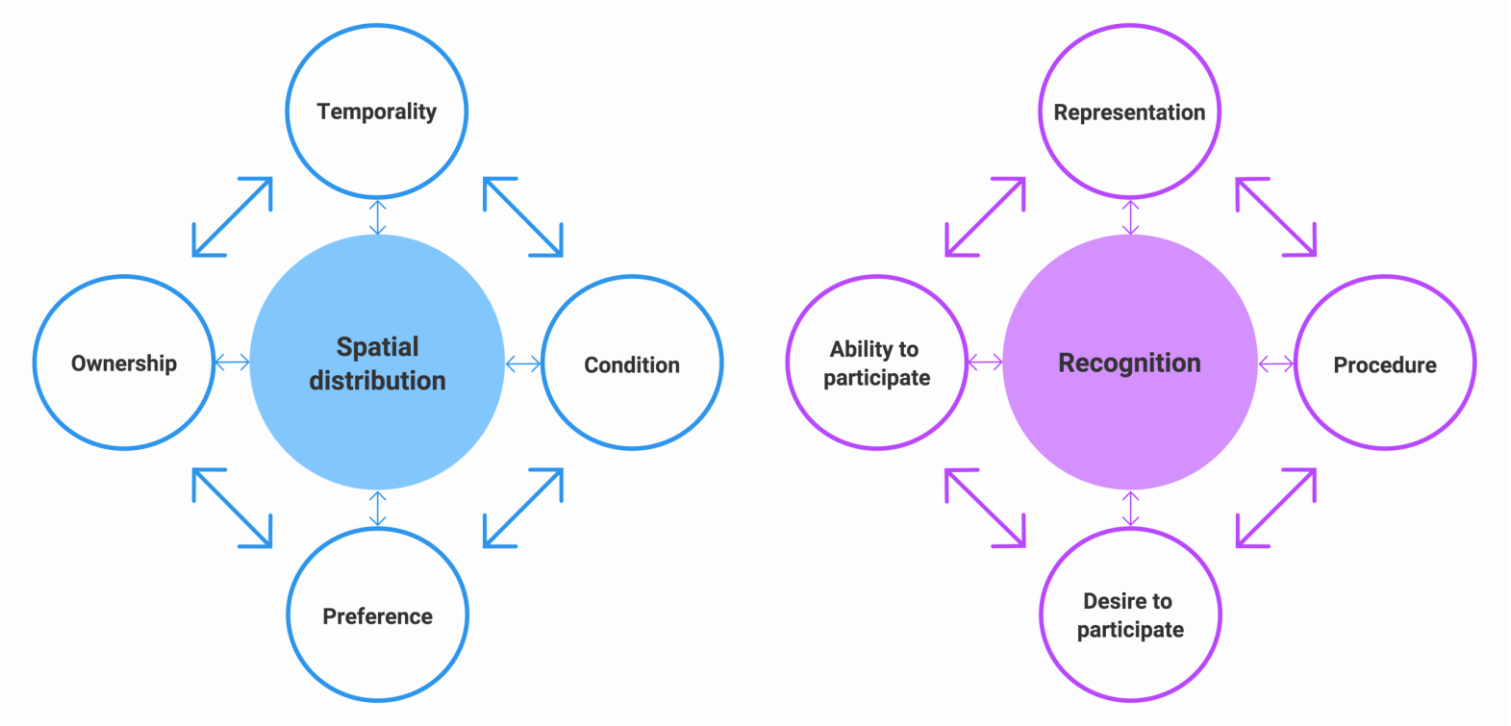


Nesbitt et al. (2018)
Urban Forestry & Urban Greening

Practitioner conceptions of urban green equity

How is urban green equity understood?

How is it operationalized?

Portland
New York
Phoenix

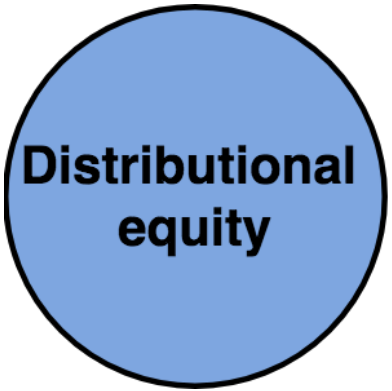
New York

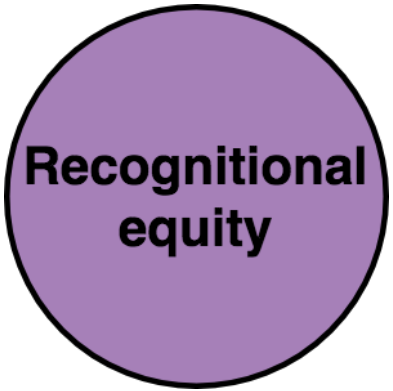
Phoenix

Portland
VOODOO
THE CLUB
ATM
fuse
OPEN

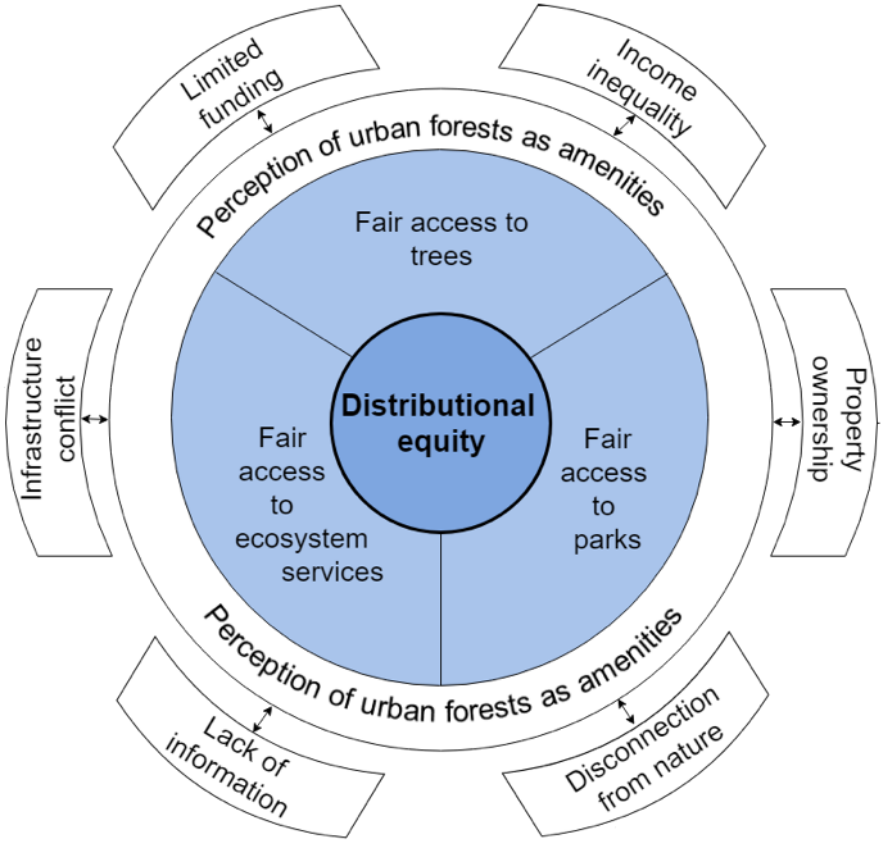
Methods

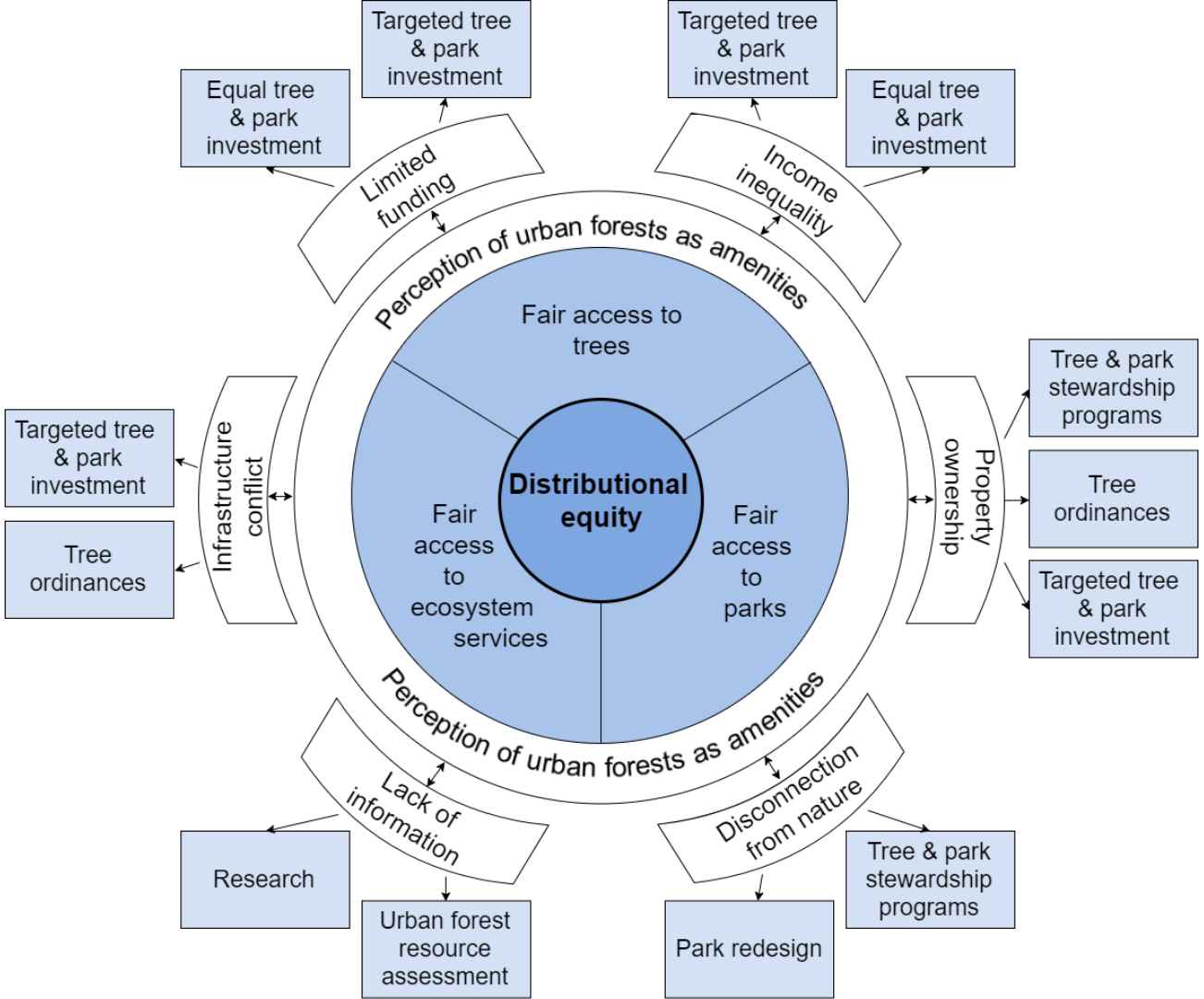
- Semi-structured interviews
- 34 practitioners across all cities (municipal/regional govt., NGOs, community members, academic, business)
- Thematic analysis to identify and quantify themes/sub-themes and relationships with each other


Distributional equity

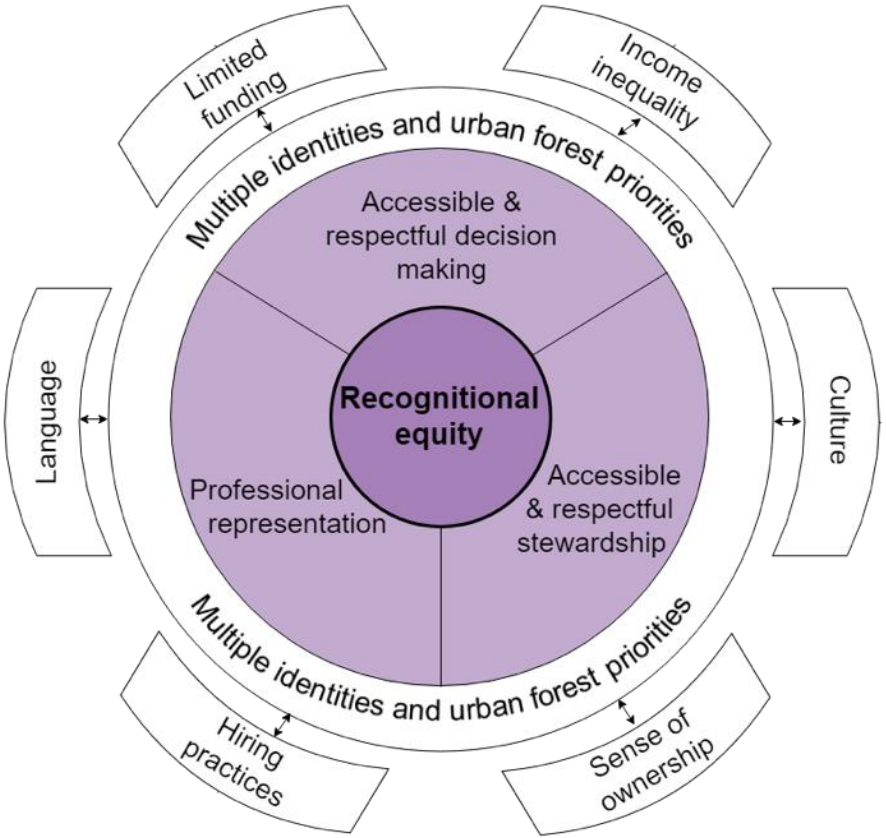

Recognitional equity

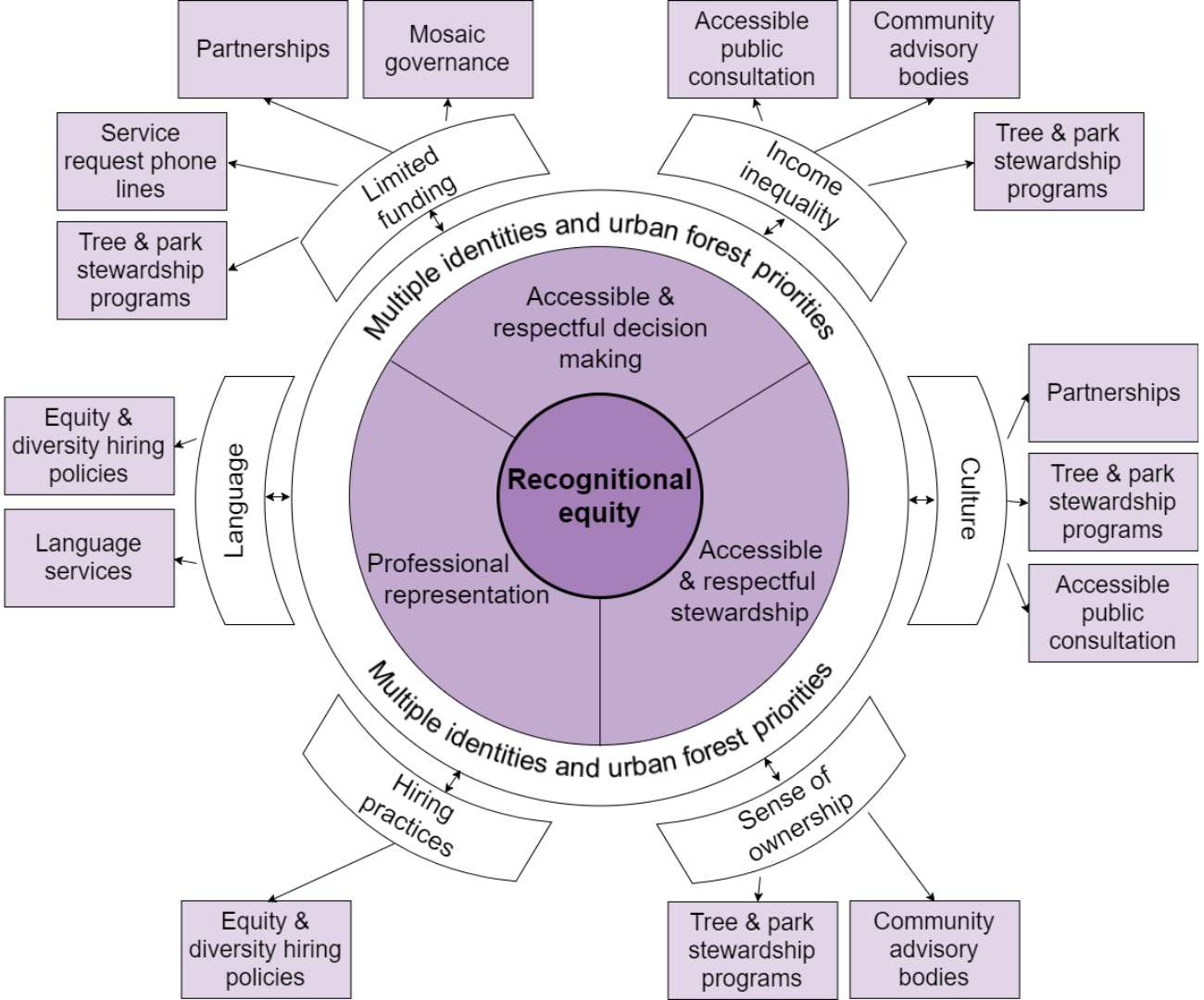
Fair access to trees
Distributional equity
Fair access to ecosystem services
Fair access to parks


Limited funding
Income inequality
Perception of urban forests as amenities
Fair access to trees
Infrastructure conflict
Distributional equity
Property ownership
Fair access to ecosystem services
Fair access to parks
Perception of urban forests as amenities
Lack of information
Disconnection from nature


Targeted tree & park investment
Targeted tree & park investment
Equal tree & park investment
Equal tree & park investment
Limited funding
Income inequality
Perception of urban forests as amenities
Fair access to trees
Distributional equity
Fair access to ecosystem services
Fair access to parks
Infrastructure conflict
Property ownership
Targeted tree & park investment
Tree ordinances
Tree & park stewardship programs
Tree ordinances
Targeted tree & park investment
Perception of urban forests as amenities
Lack of information
Disconnection from nature
Research
Urban forest resource assessment
Park redesign
Tree & park stewardship programs

Accessible & respectful decision making
Recognitional equity
Professional representation
Accessible & respectful stewardship


Limited funding
Income inequality
Multiple identities and urban forest priorities
Accessible & respectful decision making
Language
Recognitional equity
Culture
Professional representation
Accessible & respectful stewardship
Multiple identities and urban forest priorities
Hiring practices
Sense of ownership


Partnerships
Mosaic governance
Accessible public consultation
Community advisory bodies
Service request phone lines
Limited funding
Income inequality
Tree & park stewardship programs
Tree & park stewardship programs
Multiple identities and urban forest priorities
Accessible & respectful decision making
Equity & diversity hiring policies
Language
Language services
Recognitional equity
Professional representation
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Community advisory bodies

Results

- Distributional equity emphasized over recognitional equity
- Similar themes among municipalities
- Equity plays out through distinct local issues
- “Fair” has different meanings

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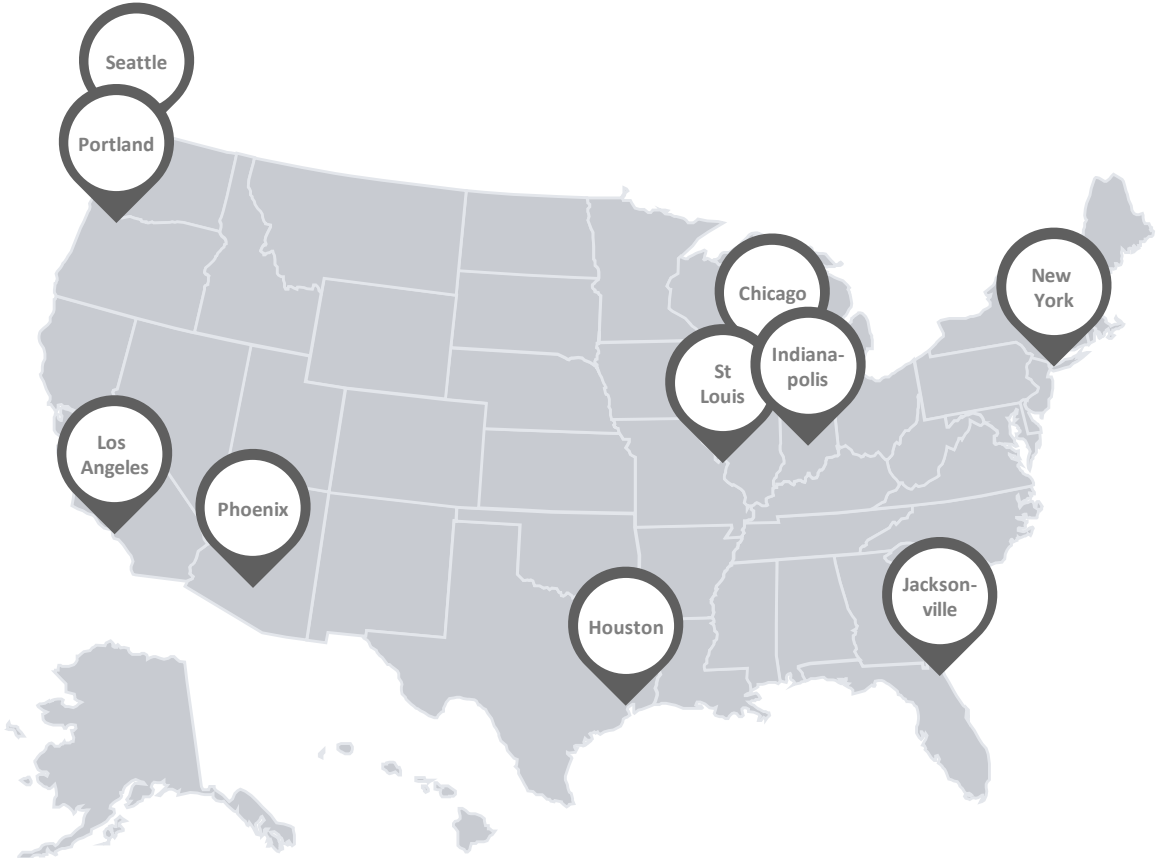
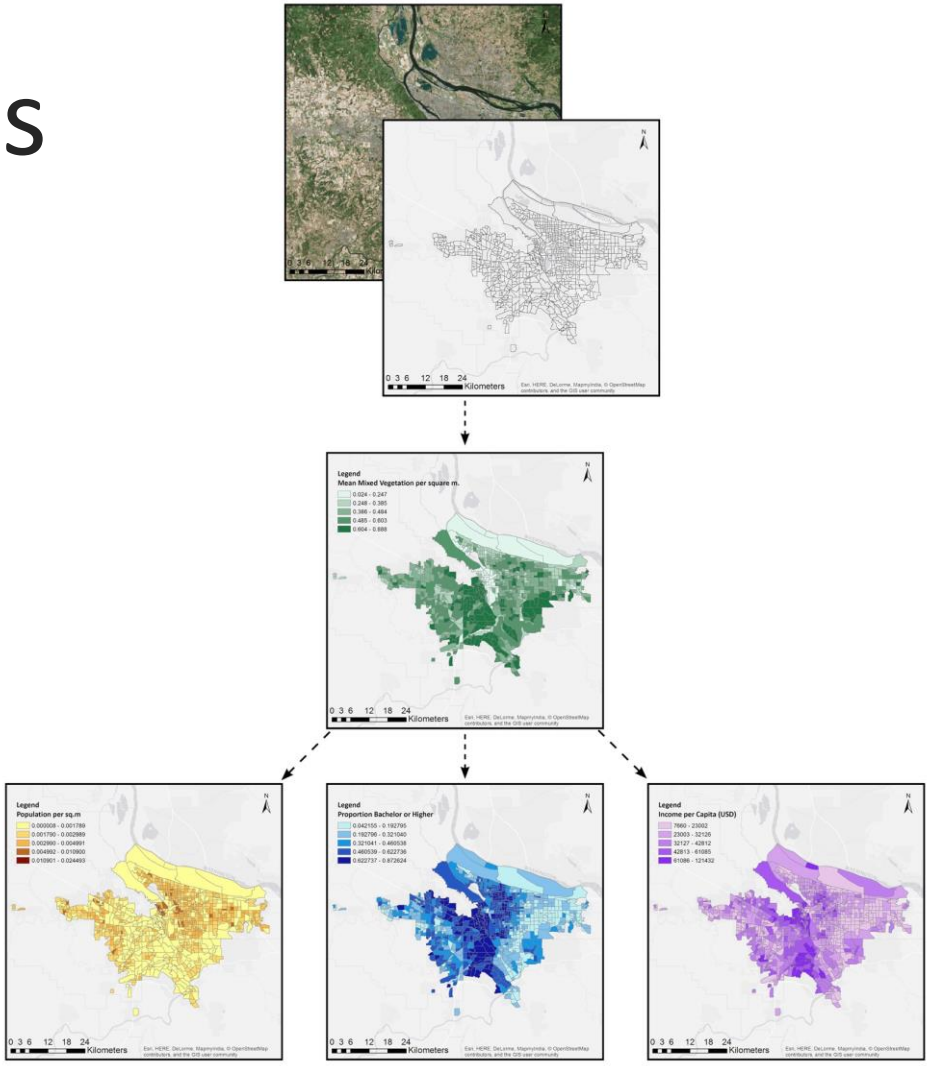
Distributional green equity: a spatial analysis

What are the principal socioeconomic factors associated with urban vegetation distribution across multiple urban areas and vegetation types?

Are different types of urban vegetation differentially distributed?

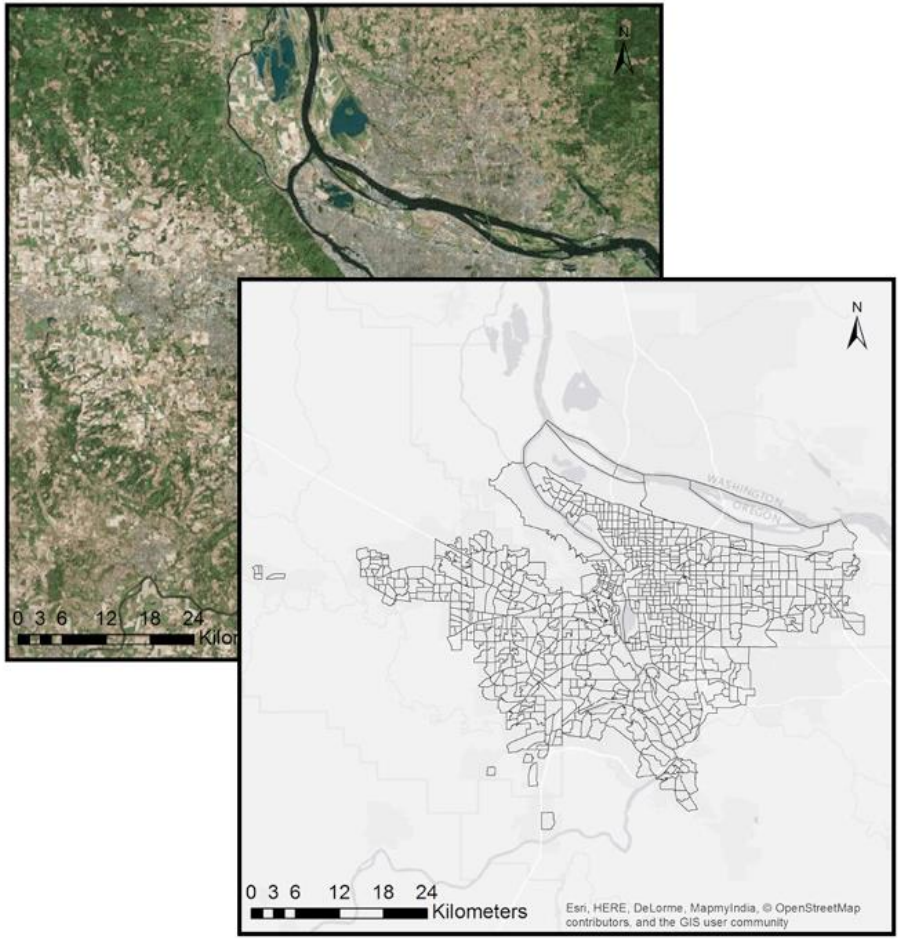

Seattle
Portland
Chicago
New York
St Louis
Indiana-polis
Los Angeles
Phoenix
Houston
Jackson-ville

Methods



Nesbitt et al. (2019)
Landscape and Urban Planning

Portland



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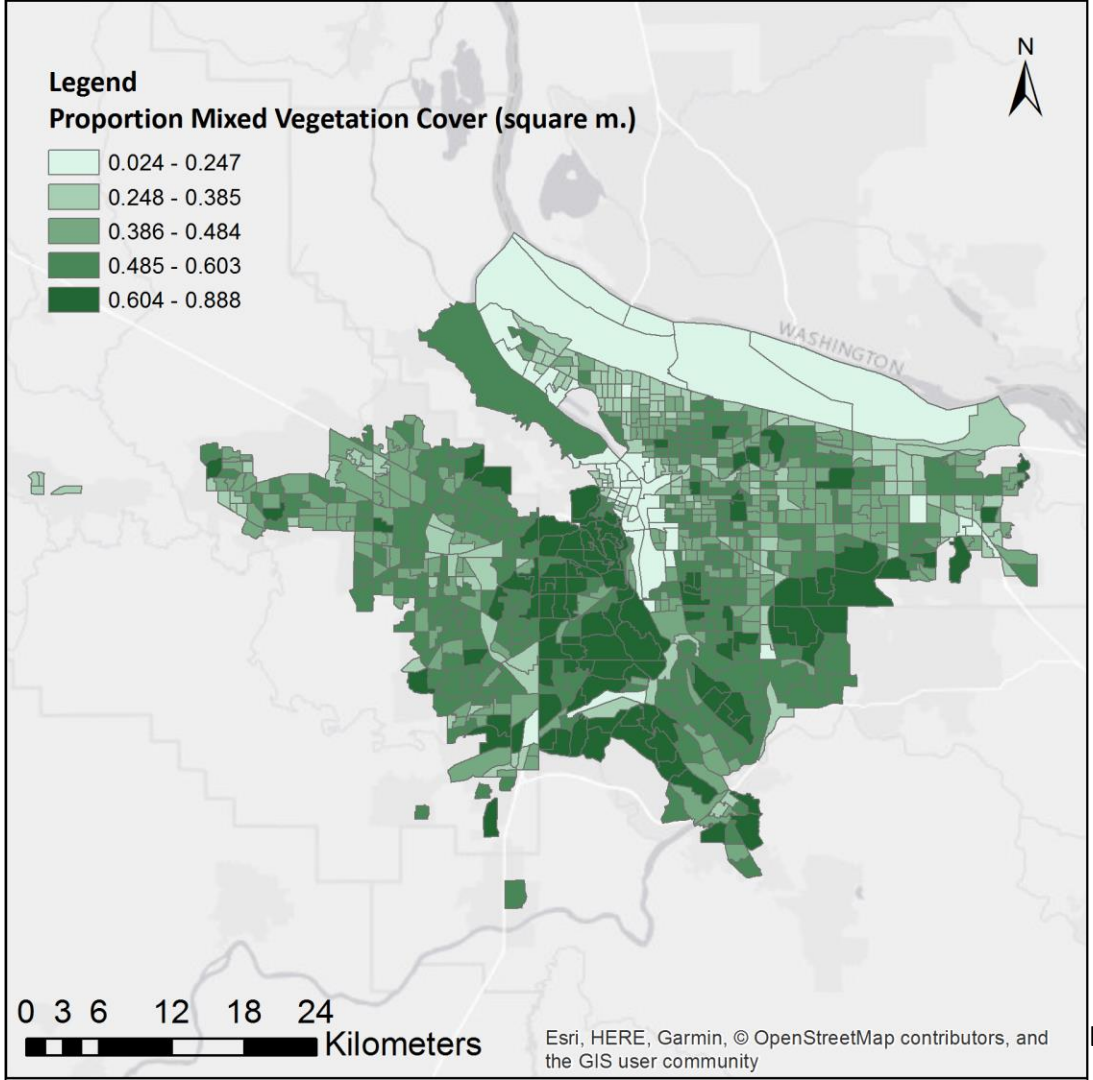

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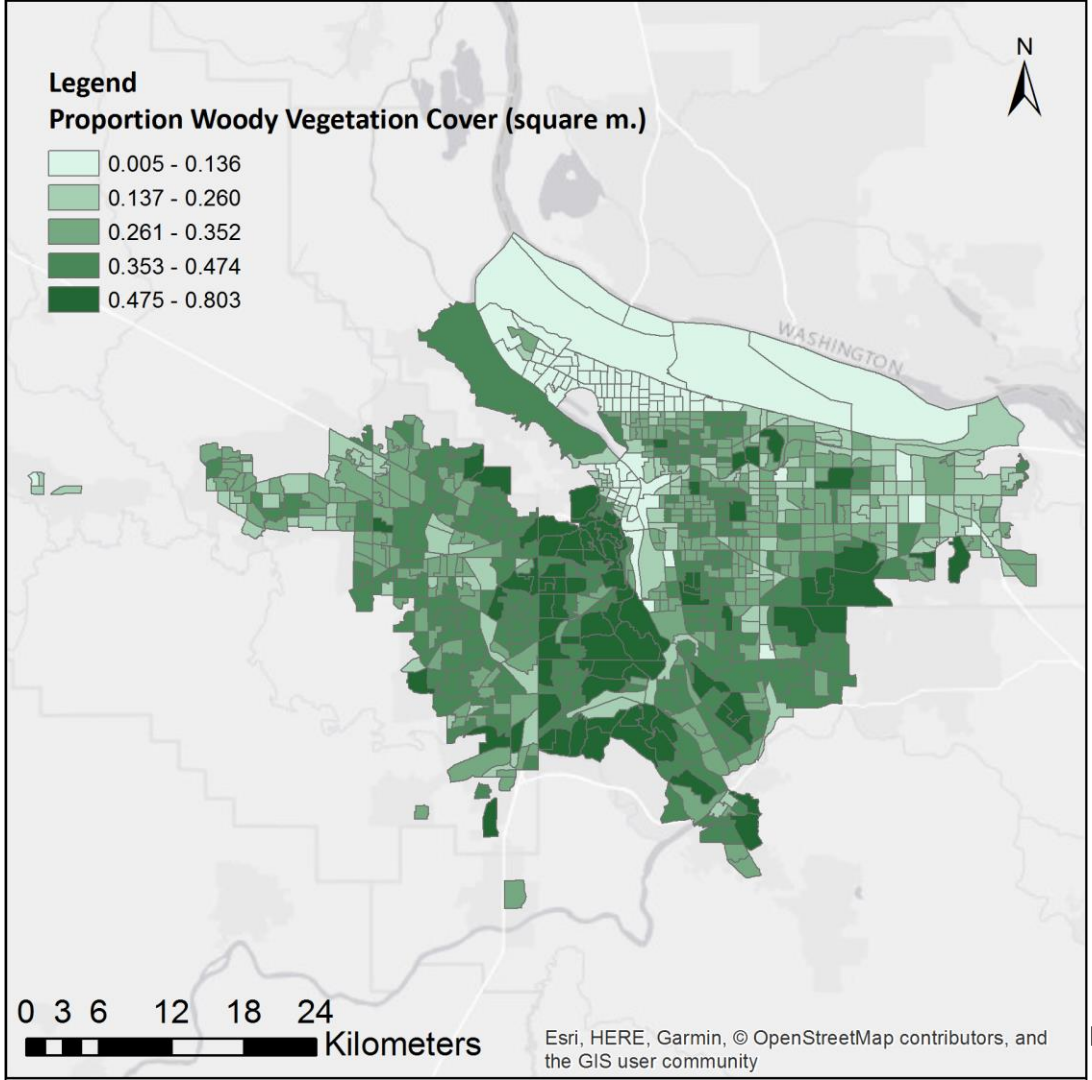

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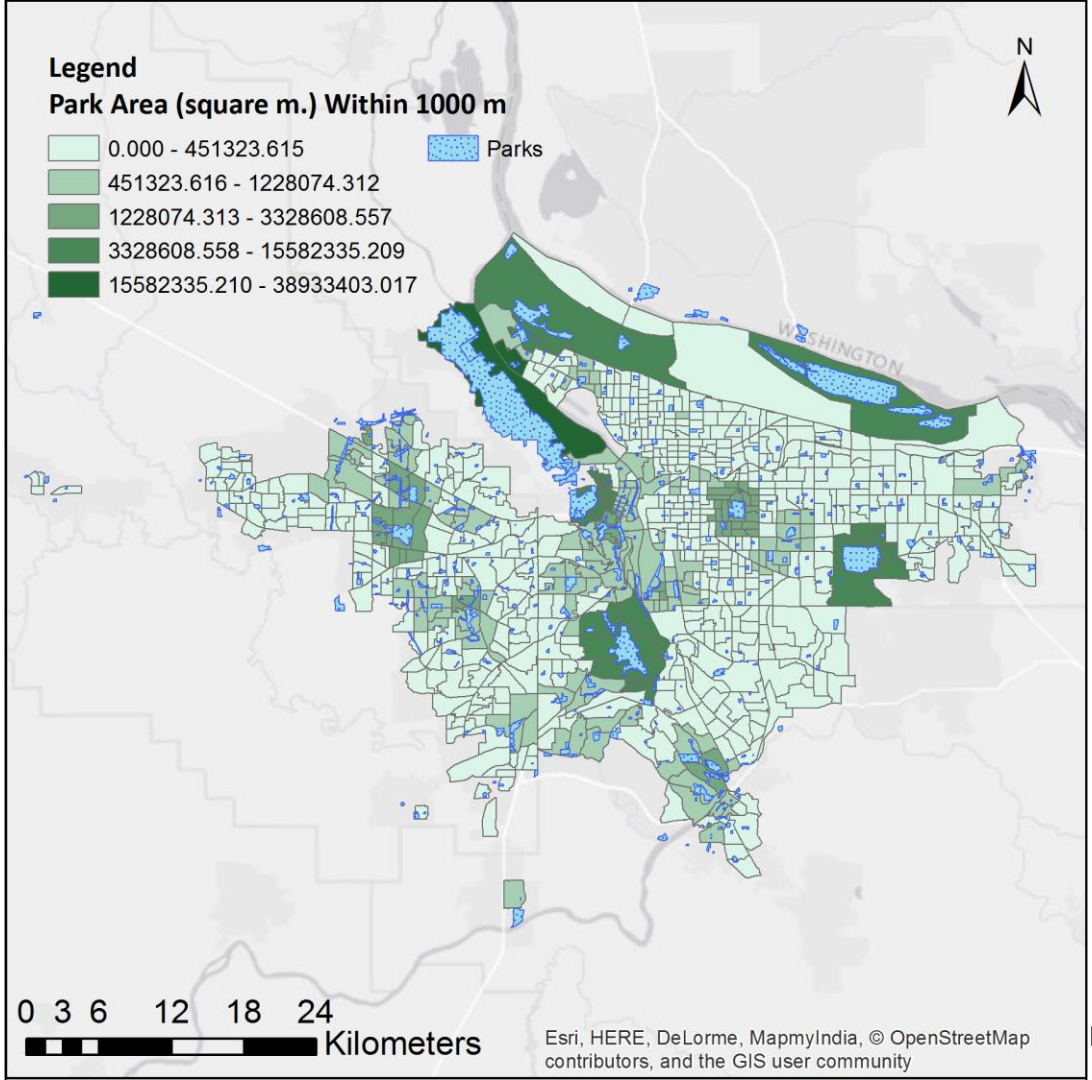

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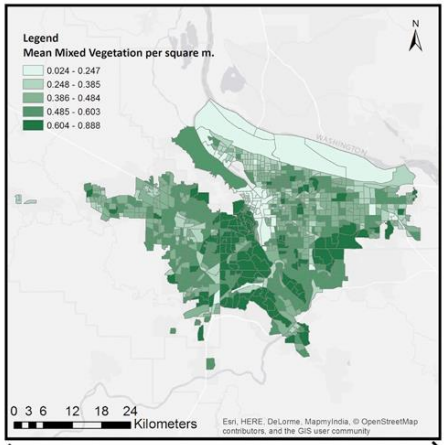

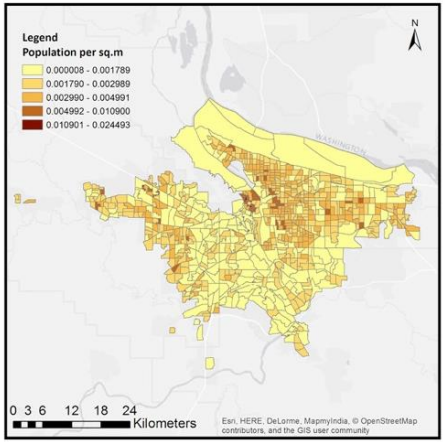

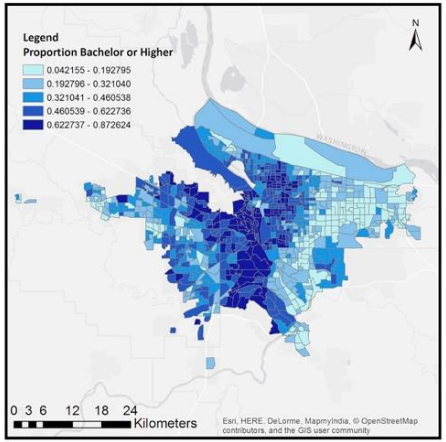

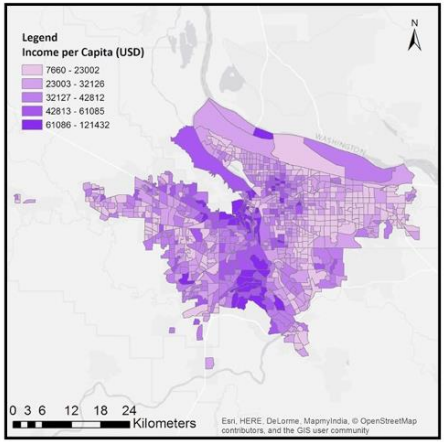

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Results

- Income and education most strongly positively associated with urban forest access
- Park area is more equitable than mixed/woody vegetation cover
- Racialized populations have lower access in richer, larger, denser cities
- *Why might this be the case?*

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Implications

- Urban forests are desirable
- Canopy enhancement should focus on lower-income/lower-education neighbourhoods
- Urban forest interventions should also include recognitional equity
- Inclusive decision making, accessible stewardship

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In-class / take-home exercise

Scenario: The City of Vancouver has funding to plant 500 trees on public land in September/October 2019. The city would like to use these trees to increase urban green equity in the city. Based on what we have discussed today:

1. Define 3 specific urban green equity objectives you would like to accomplish
2. Identify key pieces of information you will need to accomplish your objectives
3. Describe 3-4 steps you will take to meet your objectives
4. Assess the strengths and weaknesses of your approach – What is likely to work well? What is a potential source of weakness? What key challenges might you expect to encounter?

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