



Perspectives on environmental justice in planning and delivery of urban forestry goals

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Overview

- Context
 - Urban forest management plans (UFMPs)
 - Environmental justice
- Purpose & Objectives
- Methods
 - Content analysis
 - Interviews (key informant)
- Results
- Conclusions





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Urban Forest Management Plans (UFMPs)

Drivers:

- Harsh growing conditions
- Pests and diseases
- High mortality
- Low biodiversity

Goals:

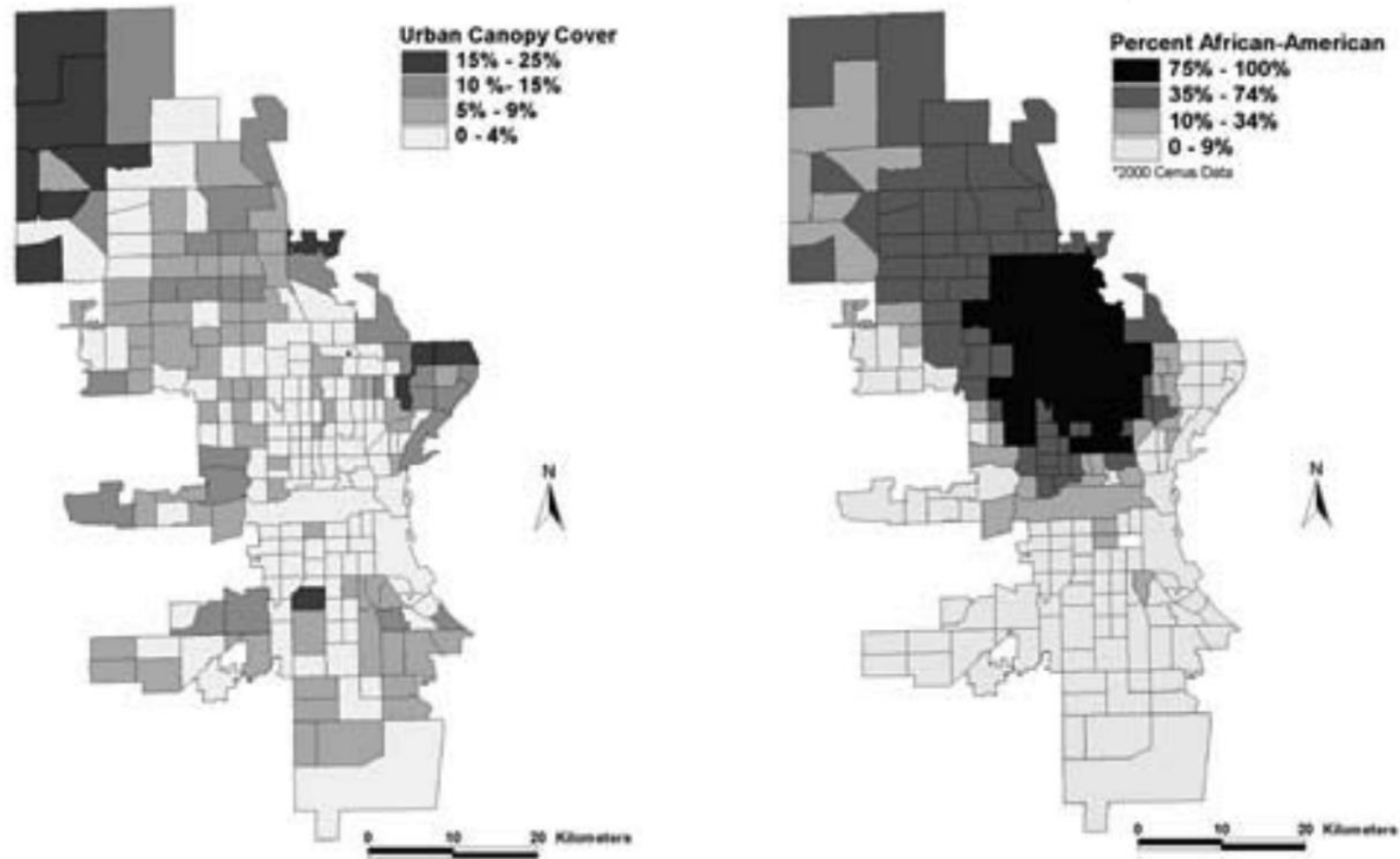
- Mitigating the effects of climate change
- Improved biodiversity
- Increased tree canopy cover
- Community engagement





Distributional Justice and Urban Forests

Milwaukee,
USA

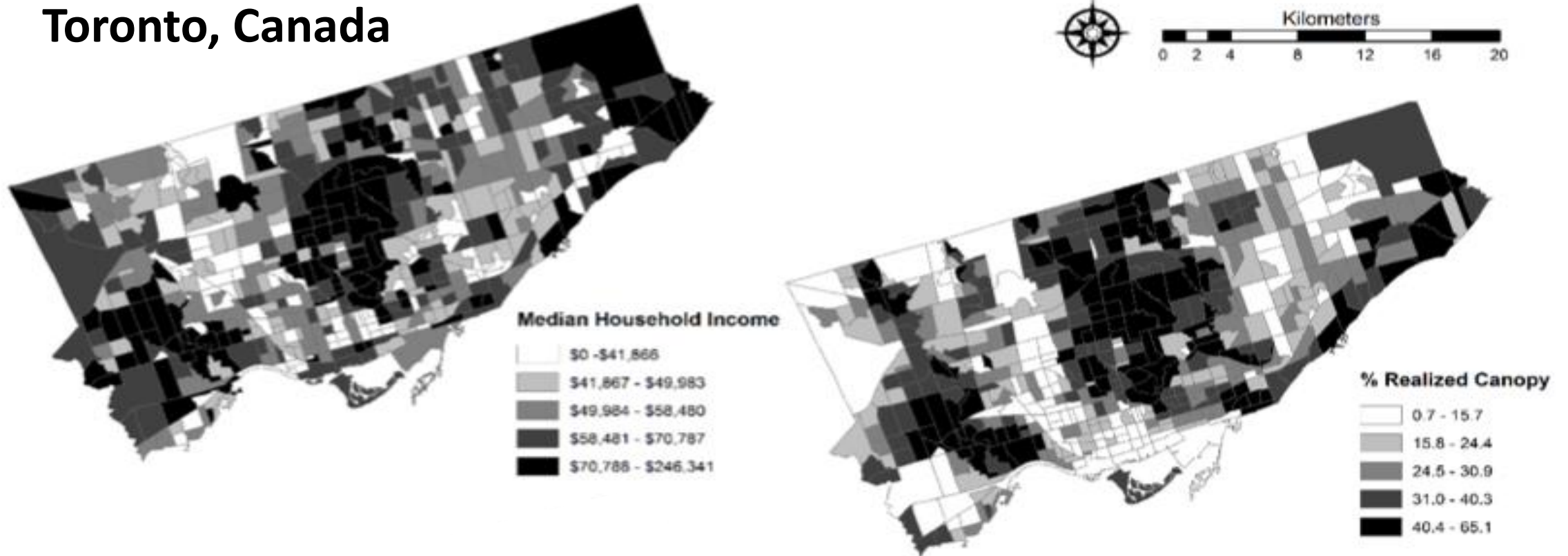


Heynen, N., Perkins, H. A., & Roy, P. (2006). **The political ecology of uneven urban green space: the impact of political economy on race and ethnicity in producing environmental inequality in Milwaukee.** *Urban Affairs Review*, 42(1), 3-25.



Distributional Justice and Urban Forests

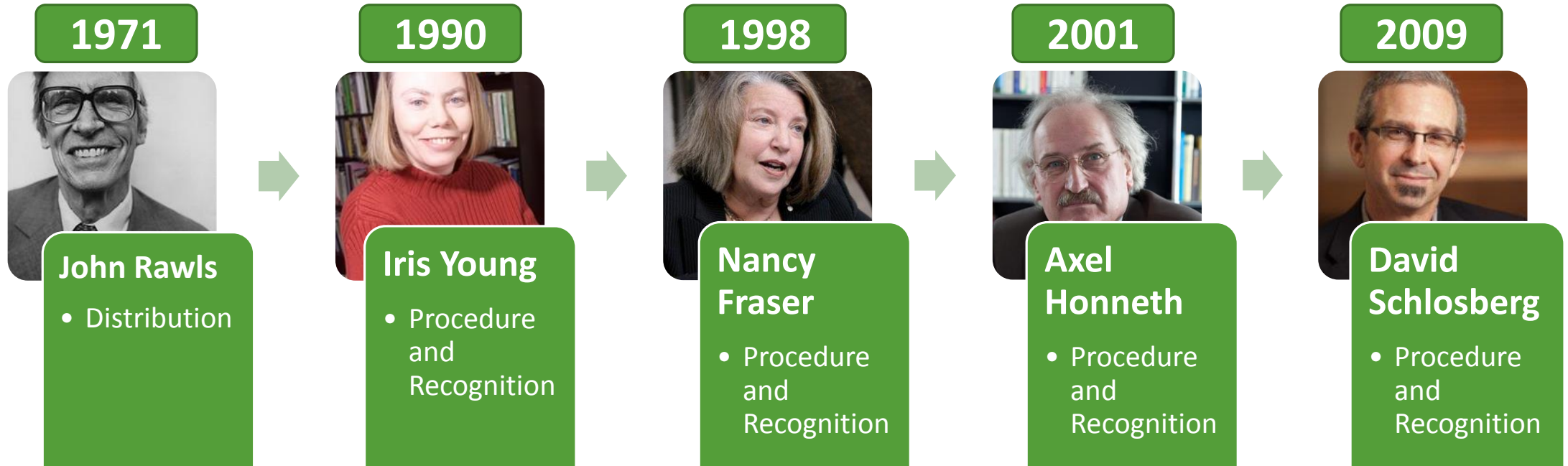
Toronto, Canada



Greene, C. S., Robinson, P. J., & Millward, A. A. (2018). **Canopy of advantage: Who benefits most from city trees?** *Journal of Environmental Management*, 208, 24-35.

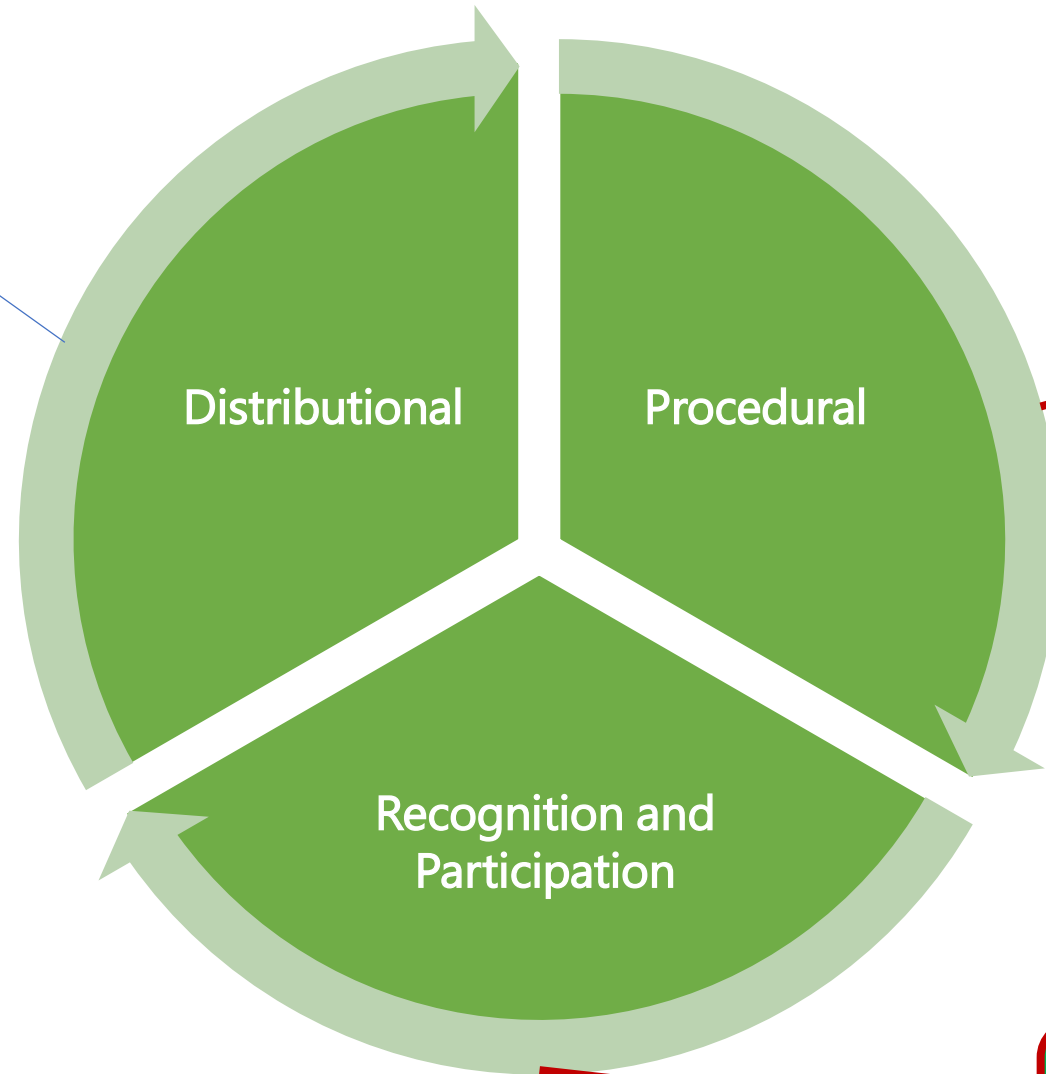


Brief History of Environmental Justice Theory





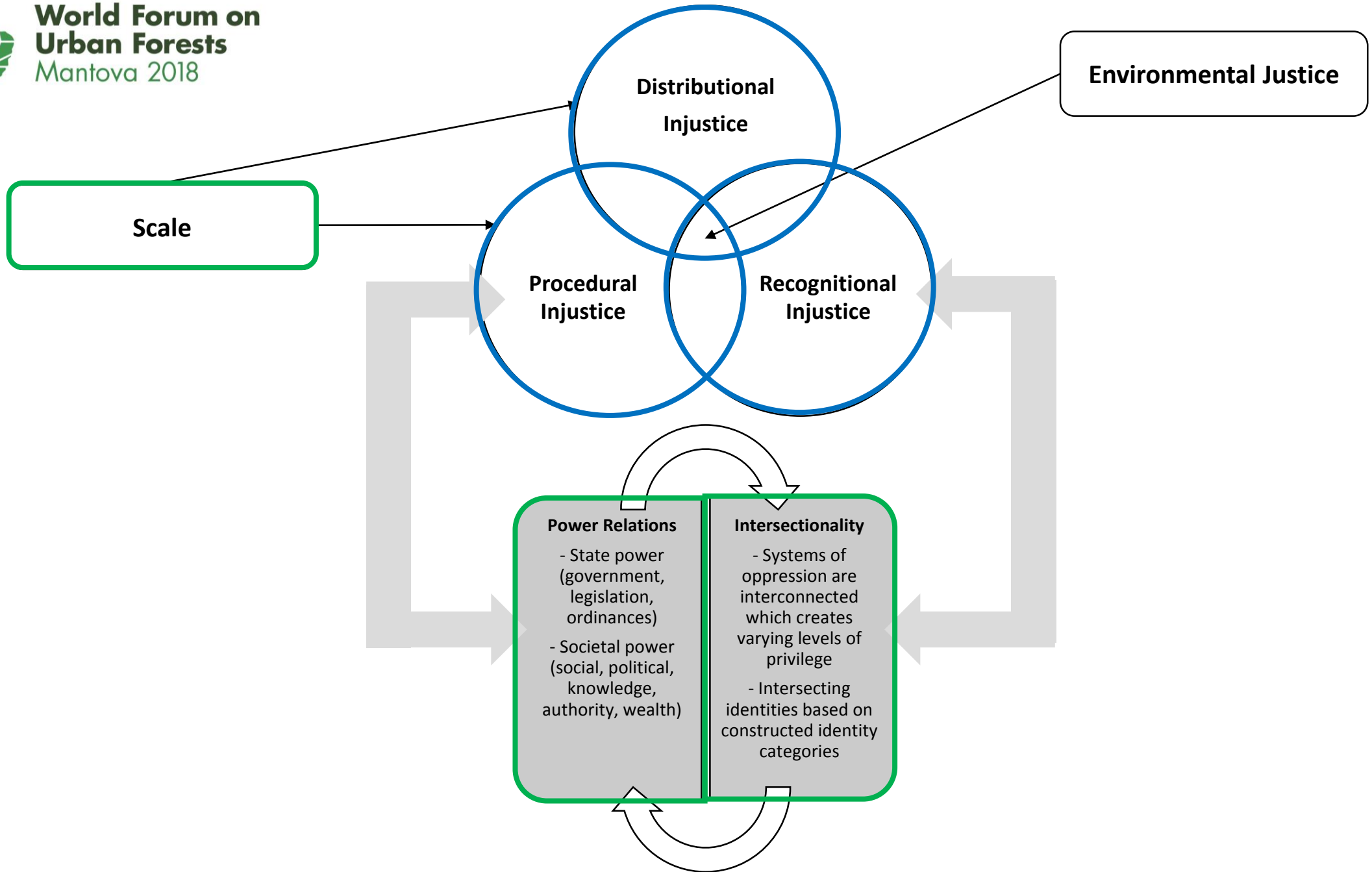
Are trees distributed
equitably across
neighbourhoods?



Do people have access to
accurate information?

Is there fairness and
transparency in the process?

Are oppressed groups
recognized within the
process?



Purpose & Objectives

Purpose:

To explore whether and how environmental justice (EJ) goals are being defined, pursued, and implemented in urban forest management plans (UFMPs) and practices.

Objectives:

- 1) Develop a framework to evaluate UFMPs;
- 2) Apply framework to UFMPs (Canada and the US) to understand how EJ goals are defined and pursued in policy and practice; and,
- 3) Investigate, using key informant interviews, conception of EJ goals, and their implementation, by urban forestry practitioners in major Canadian and American cities.



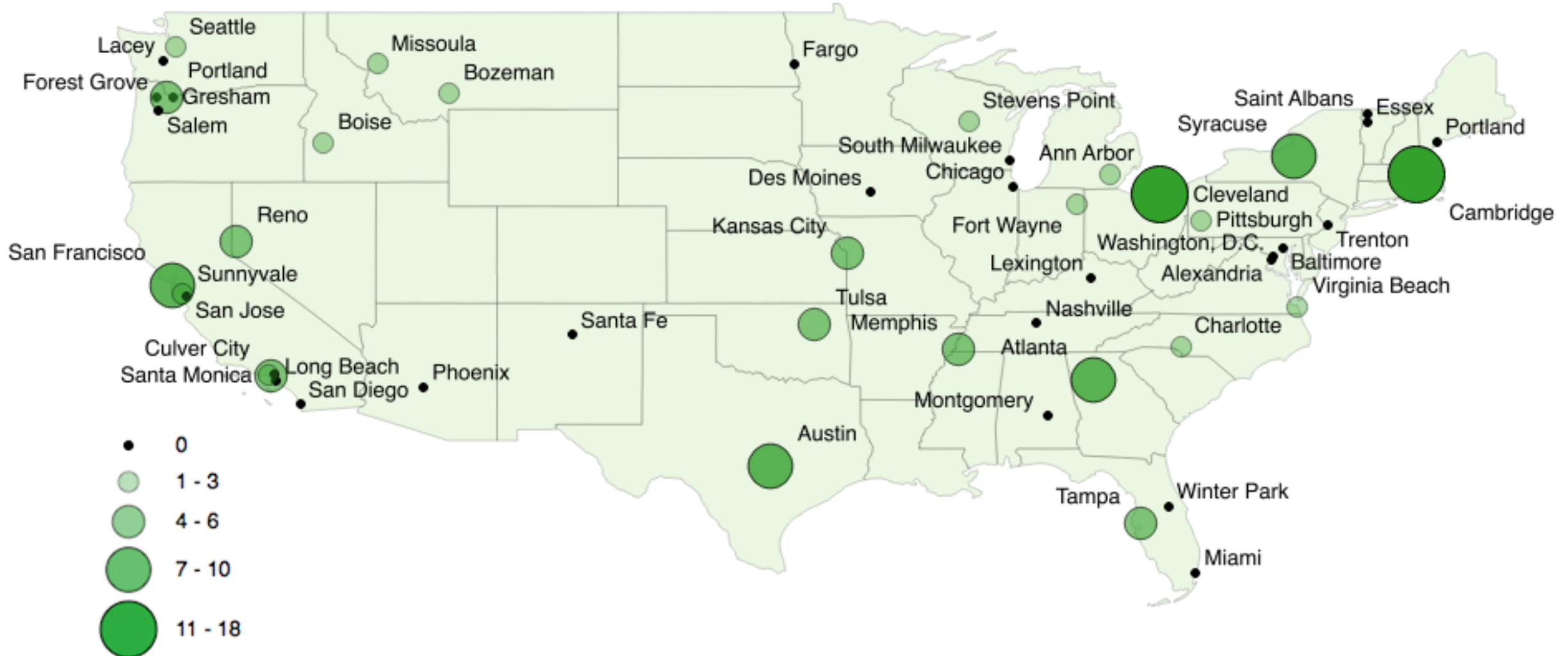
Method: Content Analysis

- All current, existing UFMPs from Canada and the United States have been collected and are being analyzed
 - 47 Canadian and 54 American
- Directed and manifest approach (latent to be completed)





Frequency of Discussion of Distributional Justice in UFMPs





Example of Distributional Justice in UFMPs

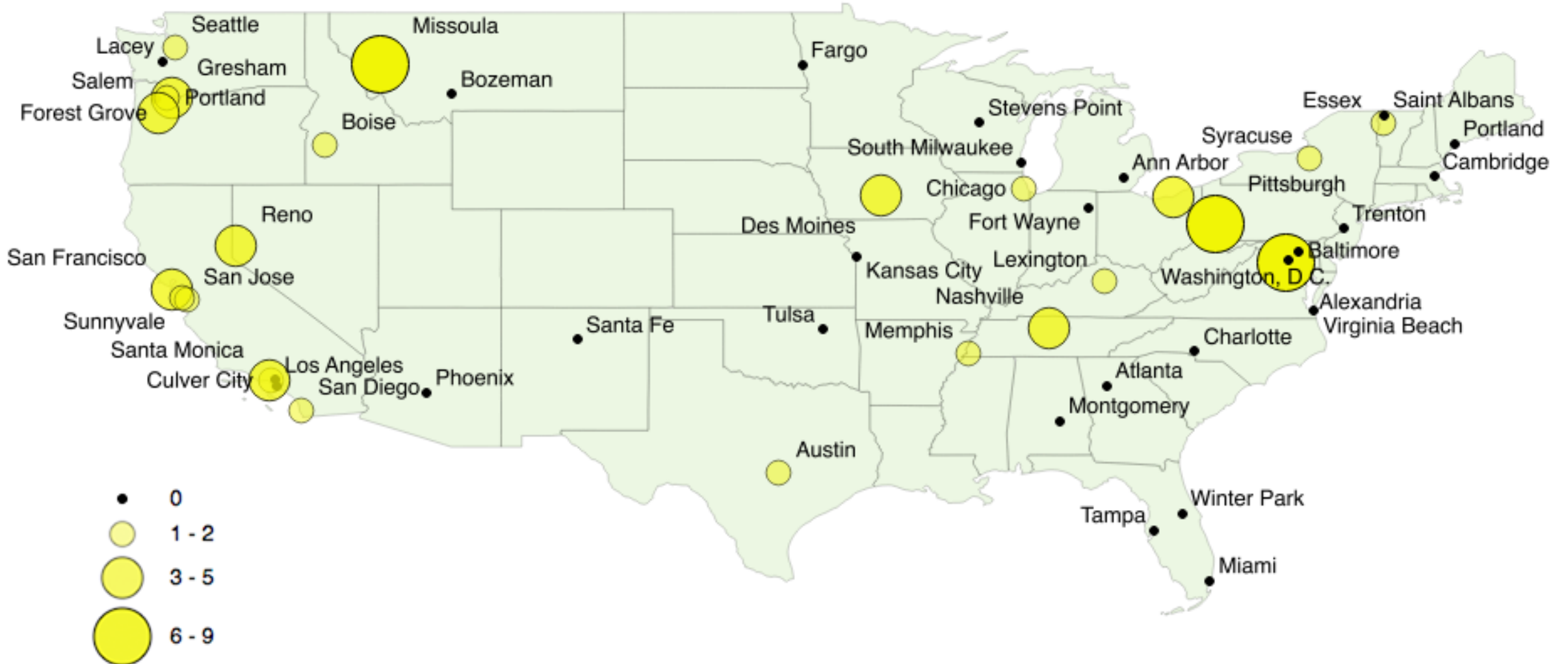
- **San Francisco:** “Increase the street tree population by half to help create a more equitable distribution of tree canopy and reduce greening inequities in different areas of the city” (p.17).





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Frequency of Discussion of Procedural Justice in UFMPs





Example of Procedural Justice in UFMPs

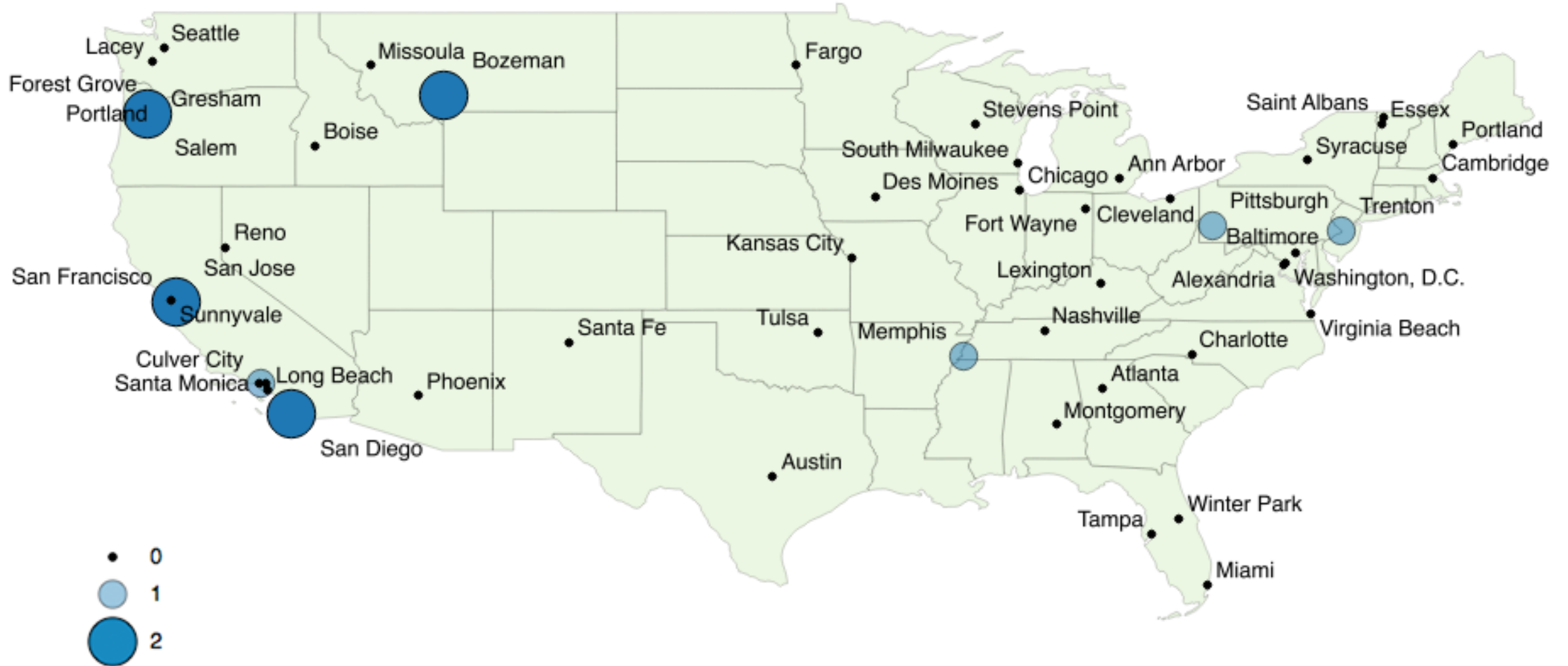
- **Seattle:** “Provide information and... facilitate access to urban forest organizations and events throughout the city; and work closely with City departments and community organizations to make urban forest outreach efforts accessible...(p.55).”





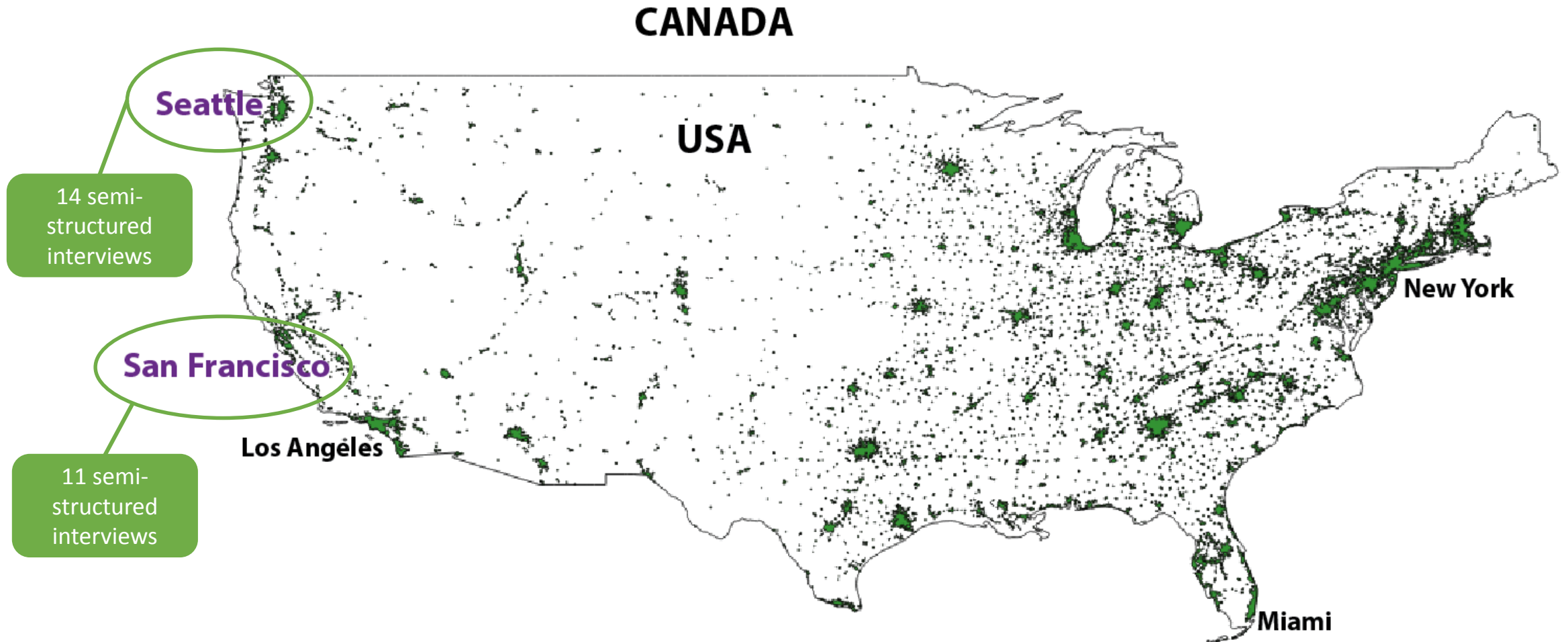
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Frequency of Discussion of Recognitional Justice in UFMPs





Method: Key Informant Interviews





Method: Key Informant Interviews

Interviews explored:

- 1) Definitions and measurement of EJ;
- 2) Collaboration with internal/external organizations, and existing capacity to make decisions that support EJ goals; and,
- 3) Public consultation and engagement strategies, including awareness of implications involving inclusion/exclusion





Preliminary Results: San Francisco and Seattle

Theme	San Francisco	Seattle
Definition of distributional justice	✓	✓
Public engagement strategies	✓	✓
Awareness of In/Exclusion	◇	◇
Collaboration and capacity	✗	✗

✓	Similar
◇	Improve
✗	Different



Why does this matter?

- Democracy: ensuring equitable and fair participation
- Municipal responsibility to build equitable, sustainable cities; this starts with knowing your constituents
 - Trust in decision-making strengthens when more groups are involved
 - Diverse groups typically make better decisions
- Achieve vibrant and accessible urban forests





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