



## Session 2.6

People Like Us: The role of urban green space in strengthening social cohesion and reducing conflicts and crime

Chair: Earl Eutsler



**World Forum on  
Urban Forests**



# 2nd World Forum on Urban Forests

Washington DC, 2023

## Trees for Youth

Tree planting as means to foster  
Community building and Job  
Opportunities for young people



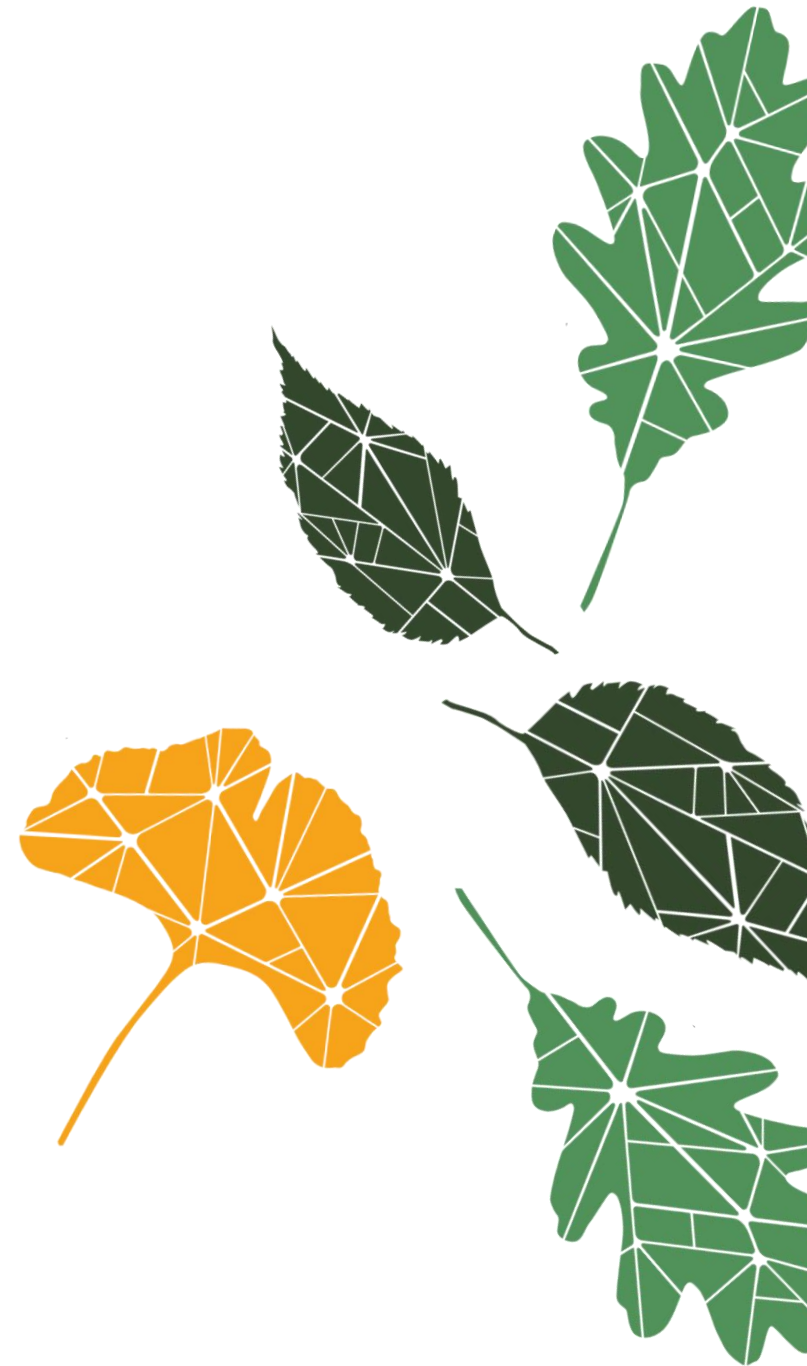
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Presented by

Hanne Johnsrud

Project leader Oslotrær

Centre for Urban Ecology, City of Oslo

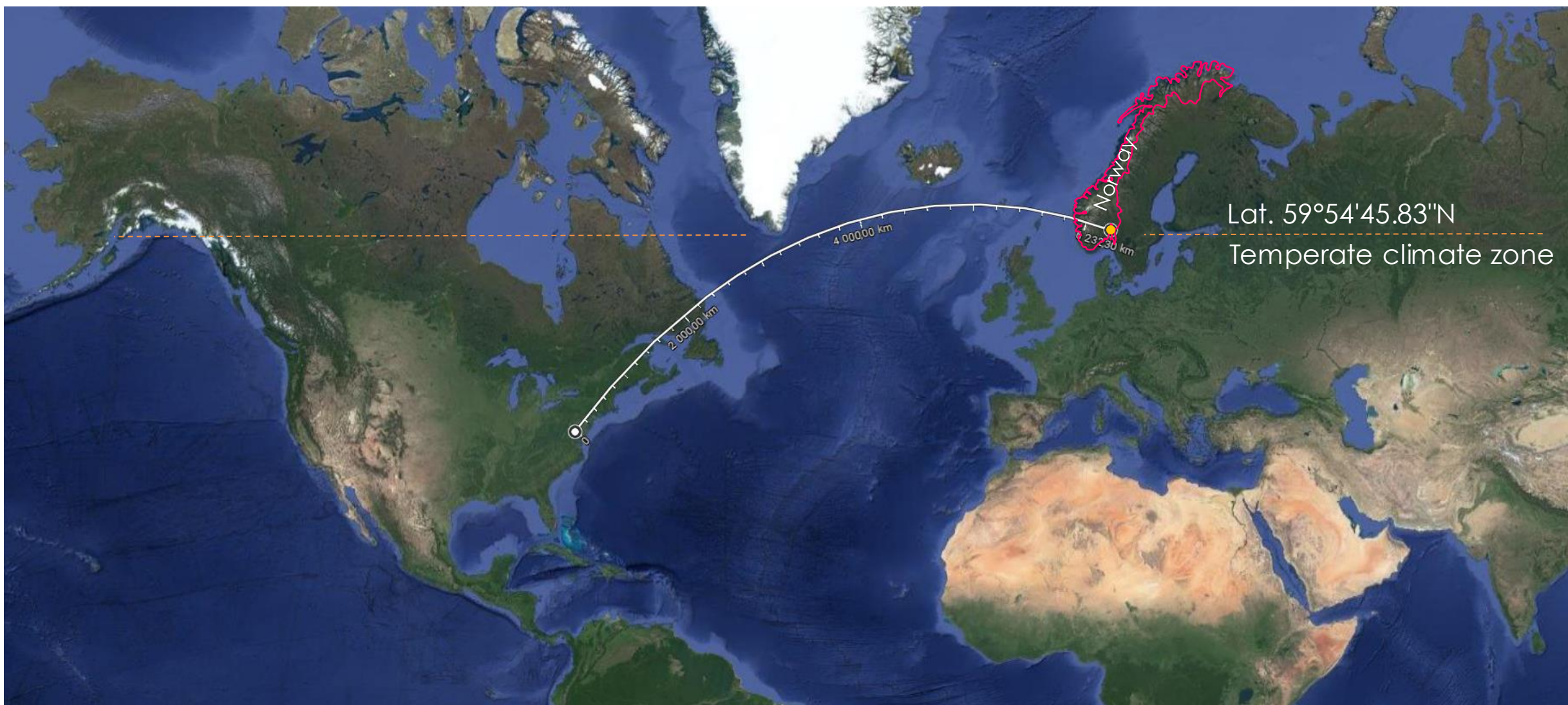






## 2nd World Forum on Urban Forests

Washington DC, 2023







Oslo, Capital city of Norway  
700 000 residents  
1.5 million in the metropolitan region





## 2nd World Forum on Urban Forests

Washington DC, 2023



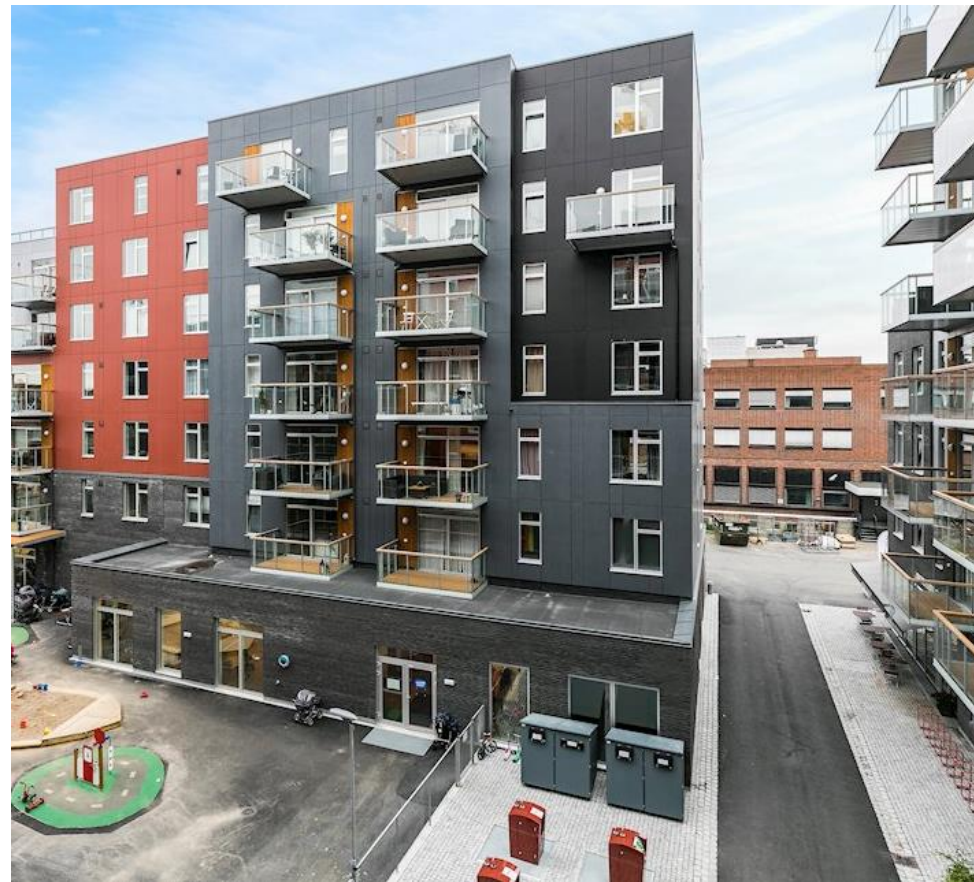


# Recognising trees as critical urban infrastructure

Sortér alt, alltid!  
Kildesortering  
hjelper oss å  
gjenvinne og  
gjenbruke mer.



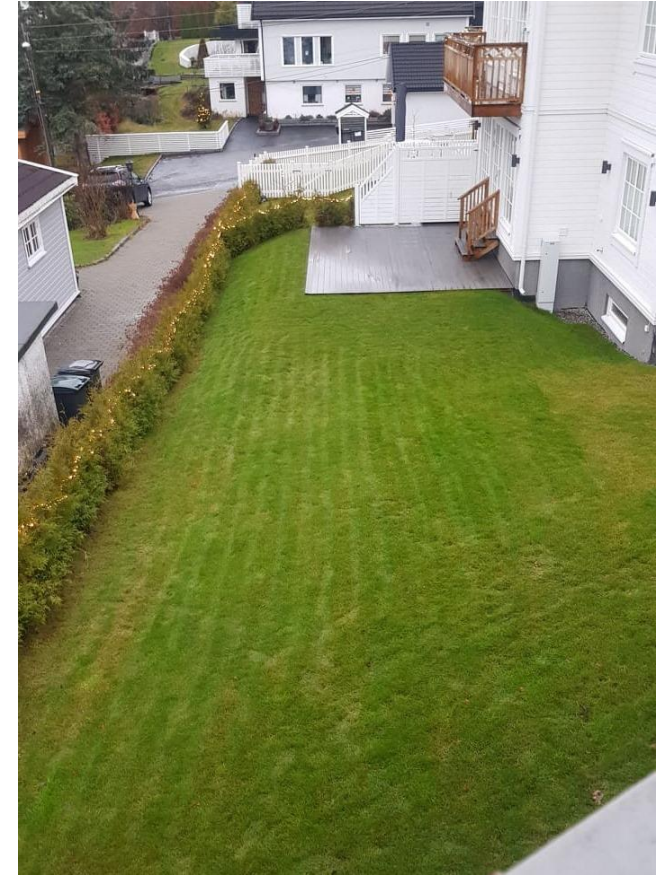
# Rapid urban growth







# Neighbour-woods are disappearing







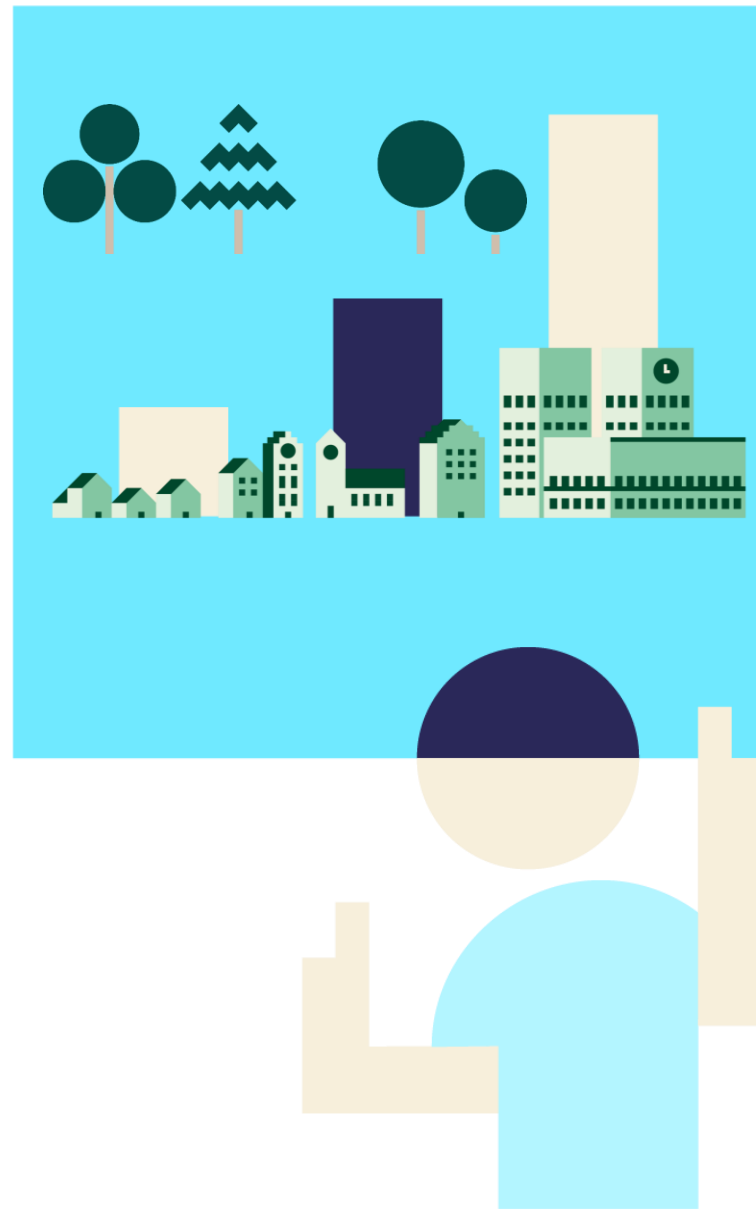
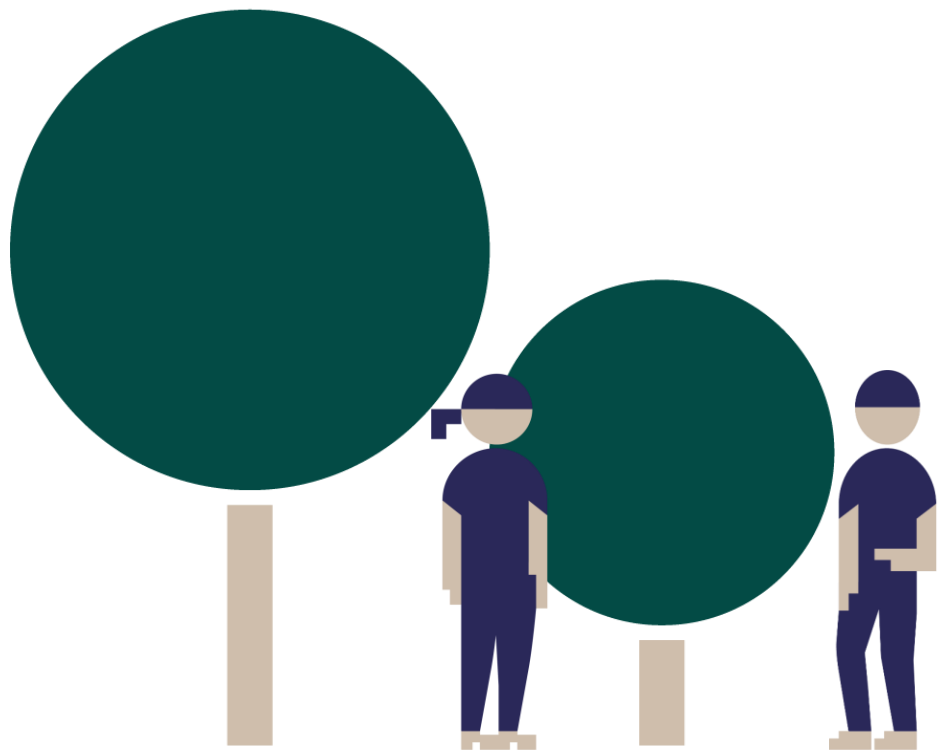
# Planting trees in hearts, minds and city-planning







## Two perspectives







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# Mapping the trees of Oslo



QR links to  
map



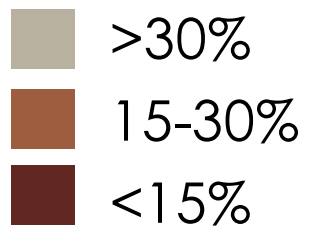




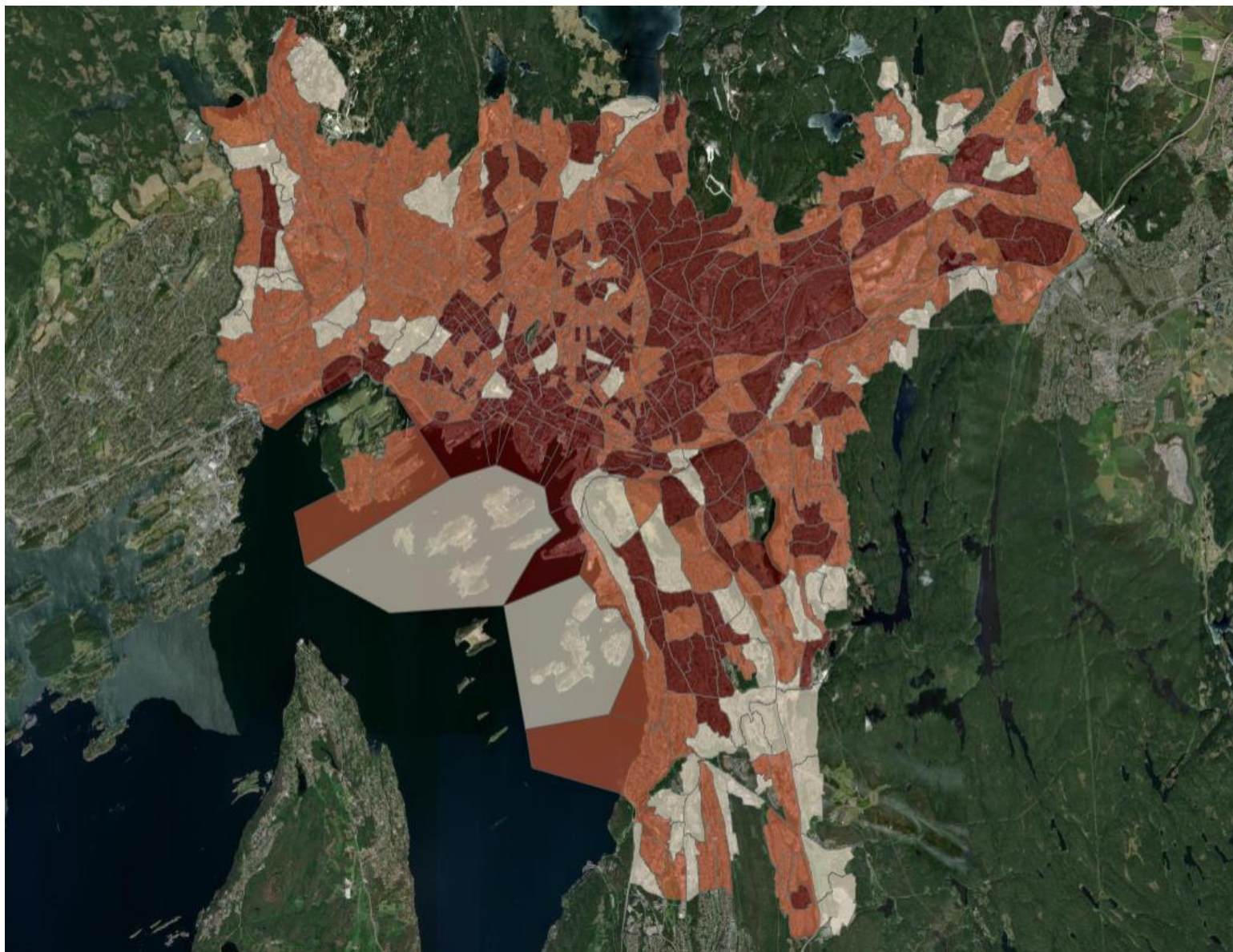
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# Canopy cover



QR links to  
map







# Community building







# Planting trees so young people can grow



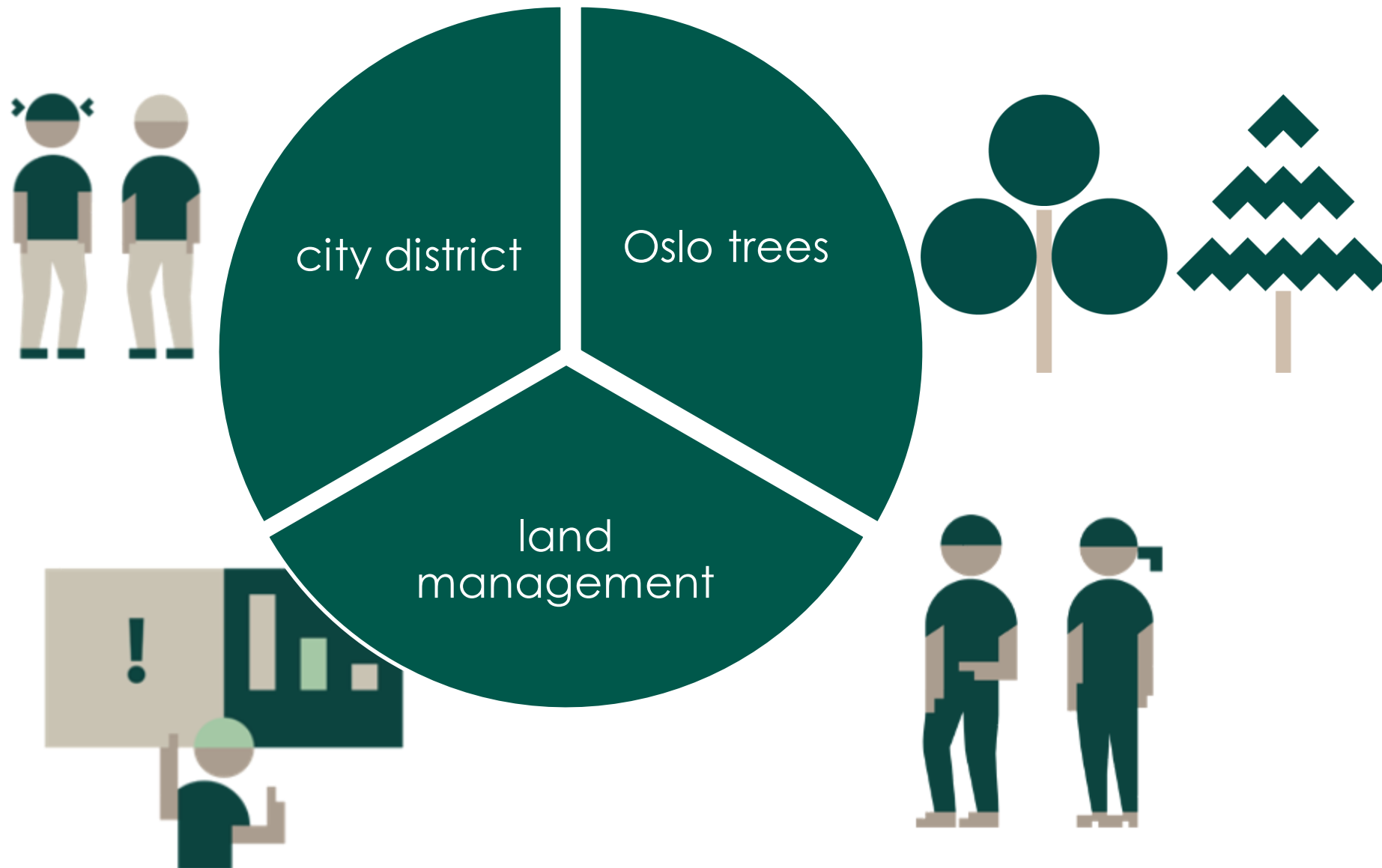
Ulvenhagen





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# Mapping context, needs and potential







## Committment over time







# A tree is never indifferent to the site







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# Reimagine the city











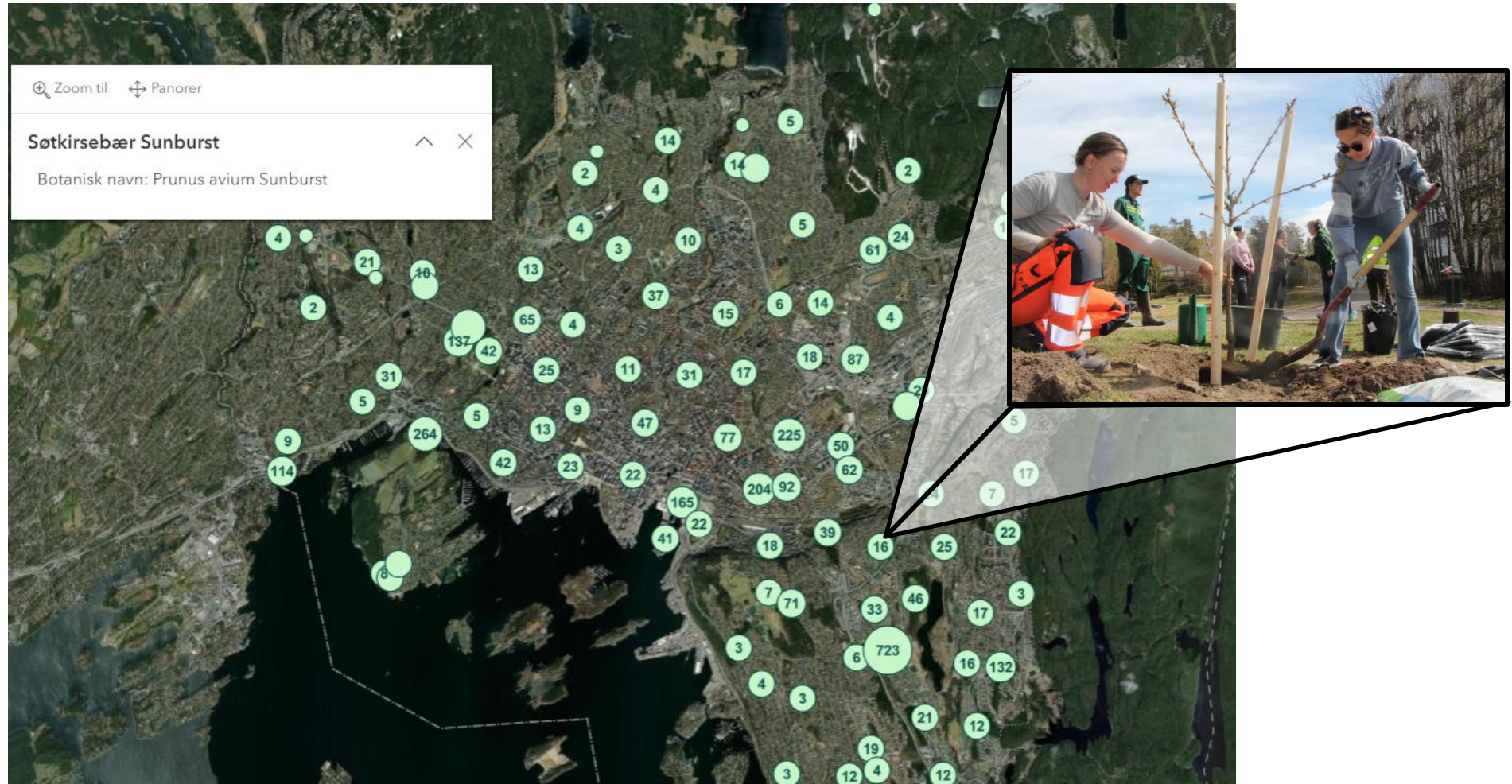
# Shape the world around you







# Making every tree count







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Washington DC, 2023







## 2nd World Forum on Urban Forests

Washington DC, 2023







# Thank you

Hanne Johnsrud | City of Oslo

[www.OSLOTRAER.no](http://www.OSLOTRAER.no)



[hanne.johnsrud@pbe.oslo.kommune.no](mailto:hanne.johnsrud@pbe.oslo.kommune.no)



Food and Agriculture  
Organization of the  
United Nations





# **2nd** **World** **Forum on** **Urban** **Forests**

**2023**



**World Forum on  
Urban Forests**





# 2nd World Forum on Urban Forests

Washington DC, 2023

## AN ASSESSMENT OF URBAN FOREST MANAGEMENT PLANS AND THEIR IMPLEMENTATION IN CANADA



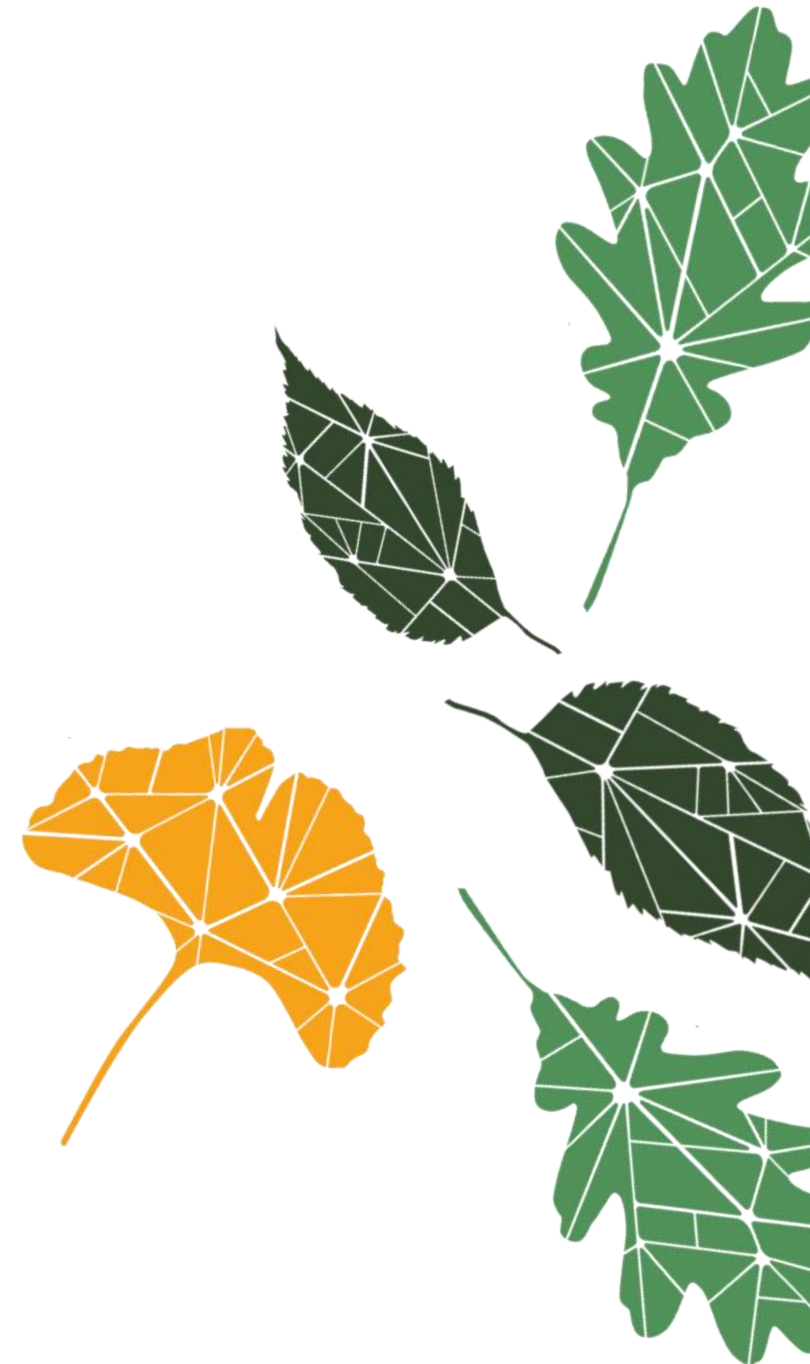
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Presented by

Camilo Ordóñez Barona



UNIVERSITY OF  
TORONTO





# Urban-nature partnership to study the socio-ecological impacts of urban forests

- Camilo Ordóñez Barona
- Tenley Conway
- Peter Duinker
- Annick St Denis
- Anusha Jain
- Melissa Heppner
- Jackson Jung
- Sylvain Delagrangre
- ... and others!





# Urban Forest Management Plans (UFMPs)



**PLAN DE GESTION DES ARBRES  
ET DES BOISÉS**

**PLAN DIRECTEUR**

des milieux naturels et de la forêt urbaine

POLITIQUE  
DE L'ARBRE  
DE LA VILLE



- “actions without a plan is not management”
- formulate how urban forests are managed
- lack specificity in key themes/topics



# Urban Forest Management Plans (UFMPs)



- lack specificity in key themes/topics
  - Native tree species
  - Ecological connectivity
  - Climate change
  - Economic incentives
  - Community stewardship
  - Equitable distribution
  - ...





## 2nd World Forum on Urban Forests

Washington DC, 2023



Government  
of Canada

Gouvernement  
du Canada

# 2BILLION TREES



### FORESTS AND CLIMATE CHANGE

Natural Resources Canada unlikely to plant 2 billion trees by 2031 unless the program sees significant changes









Report 1 | Reports of the Commissioner of the Environment and Sustainable Development





### Environmental Research

Volume 156, July 2017, Pages 97-107


## Challenges for tree officers to enhance provision of regulating ecosystem services from urban forests

Helen J. Davies<sup>a</sup>  , Kieron J. Doick<sup>b</sup>  , Malcolm D. Hudson<sup>a</sup>  , Kate Schreier<sup>a</sup>  

Show more 

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<https://doi.org/10.1016/j.envres.2017.03.020> 

[Get rights and content](#) 



### Urban Policy and Research >

Volume 37, 2019 - Issue 2

Submit an article


Journal homepage

## Land-Use Planning's Role in Urban Forest Strategies: Recent Local Government Approaches in Australia

Kath Phelan<sup>a</sup> , Joe Hurley<sup>a</sup>  & Judy Bush<sup>a</sup> 

Pages 215-226 | Received 25 Apr 2017, Accepted 23 Aug 2018, Published online: 17 Oct 2018

 Download citation

 <https://doi.org/10.1080/08111146.2018.1518813>

 Check for updates













### Urban Forestry & Urban Greening



Volume 77, November 2022, 127737




## Where is environmental justice? A review of US urban forest management plans

Amber Grant<sup>a</sup>  , Andrew A. Millward<sup>a</sup>  , Sara Edge<sup>b</sup>  , Lara A. Roman<sup>c</sup>  , Cheryl Teelucksingh<sup>d</sup>  

Show more 

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<https://doi.org/10.1016/j.ufug.2022.127737> 

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## *What do we need to know?*

1. What is the current content of UFMPs?:

1.1 What are the changes over time?

1.2 Role of social-ecological characteristics?

2. How do managers view UFMP implementation?

2.1 UFMP objectives

2.2 UFMP outcomes

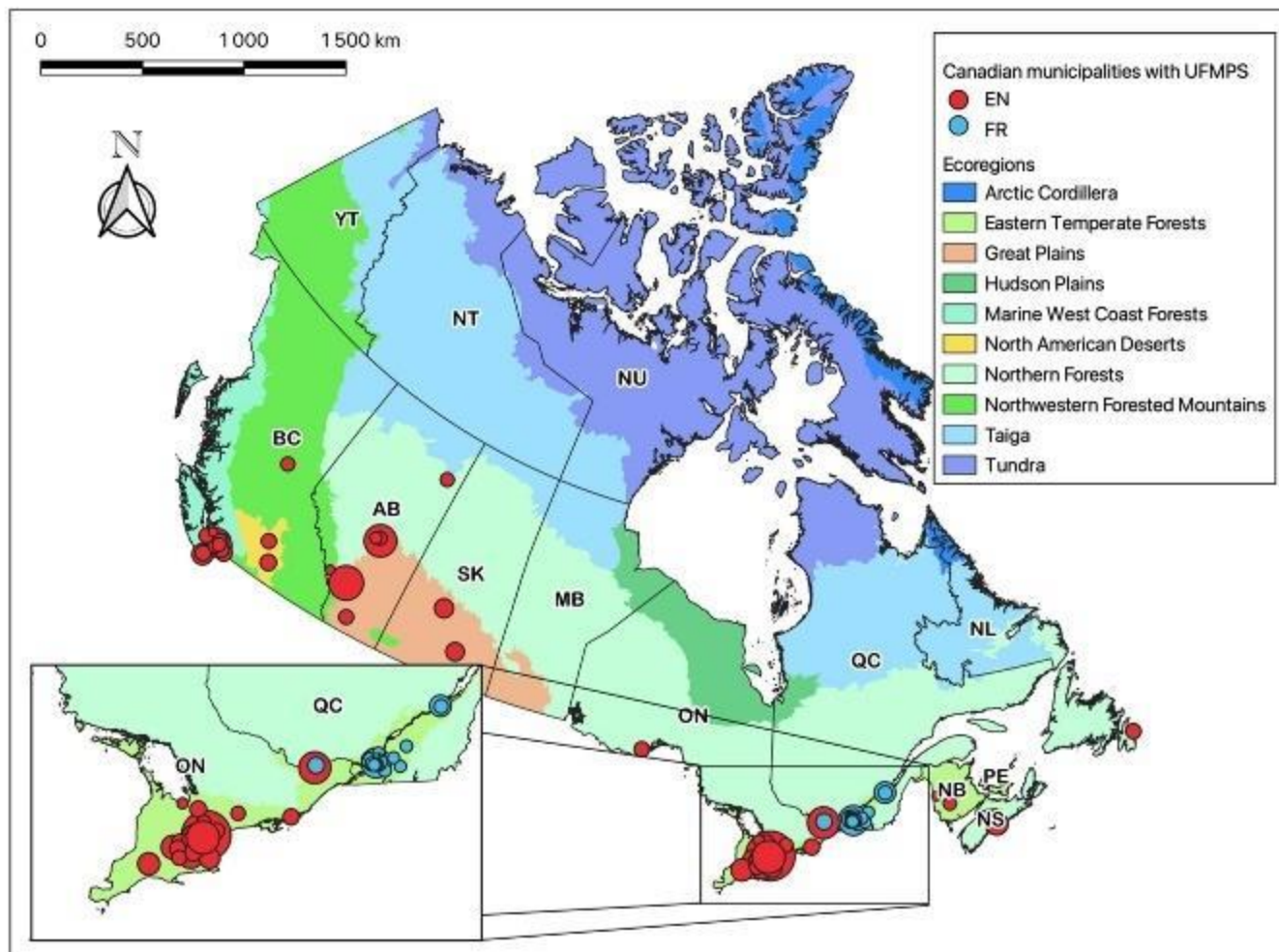
2.3 UFMP challenges and opportunities





# Canadian UFMP content

$n=74$





# Canadian UFMP content

- Quantitative analysis
- Text mining: probabilistic topic modelling (TM)
- R, topic model package, LDA algorithm

## TOPICS

- Qualitative analysis
- Interpretative mixed inductive/deductive coding
- QSR NVivo v.12, theme and subthemes

## THEMES

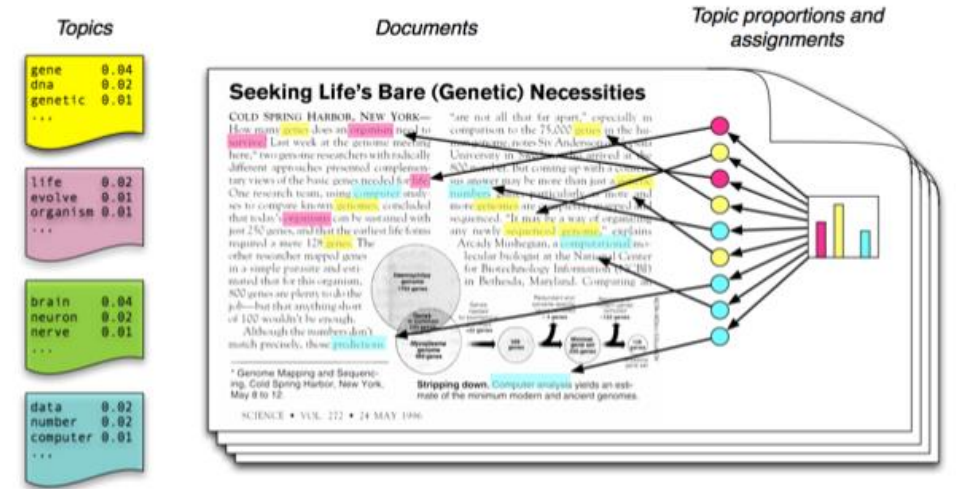
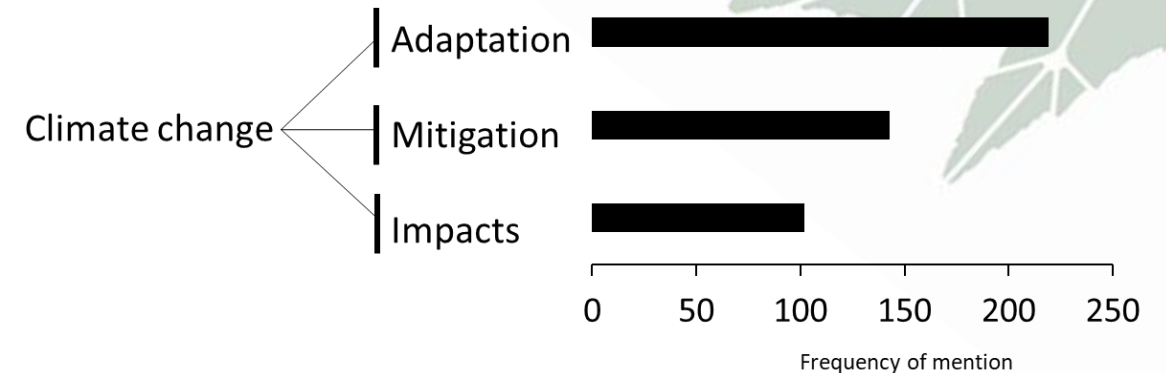


Figure source: Blei, D. M. (2012). Probabilistic topic models. *Communications of the ACM*, 55(4), 77-84.

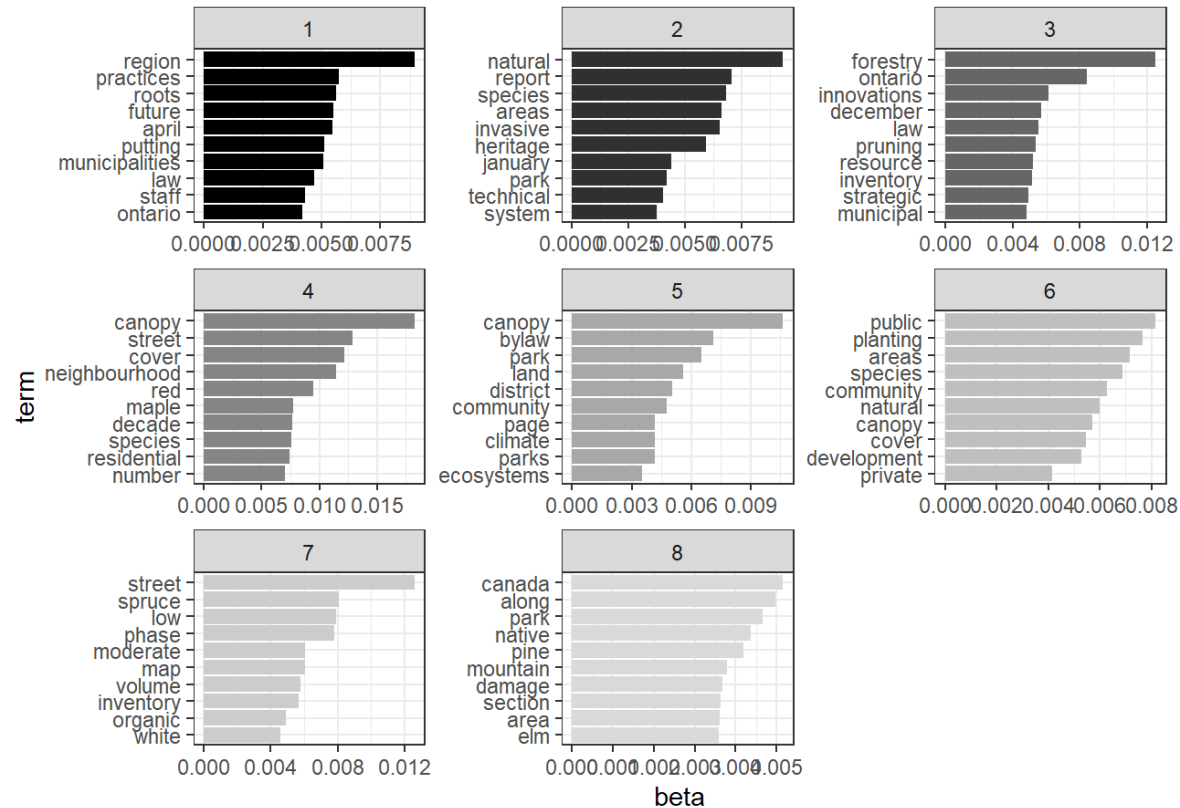




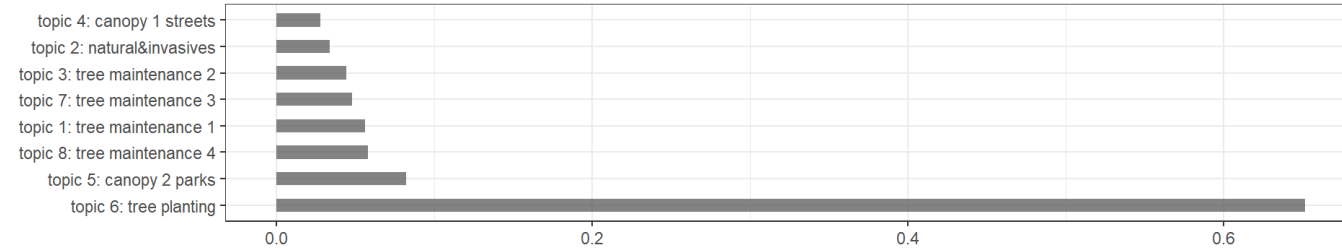
# Canadian UFMP content

$n = 74$

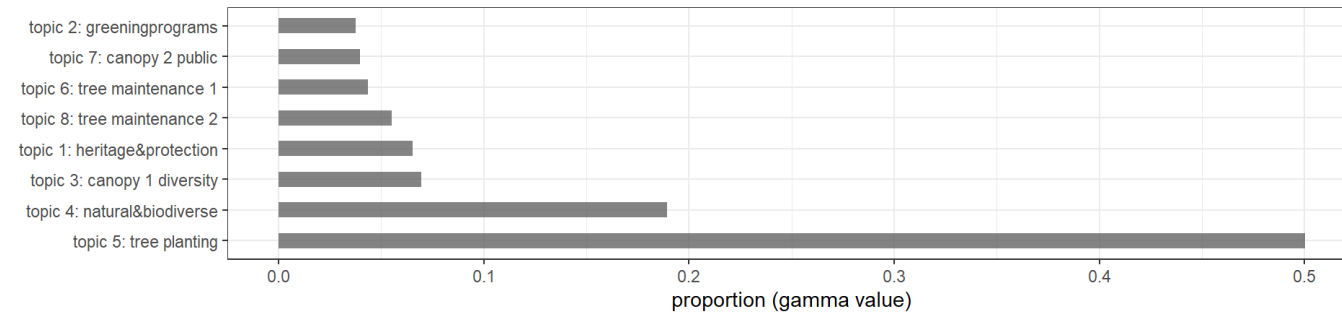
Most **TOPICS** are about tree planting



Average topic proportions across UFMPs  
english



french

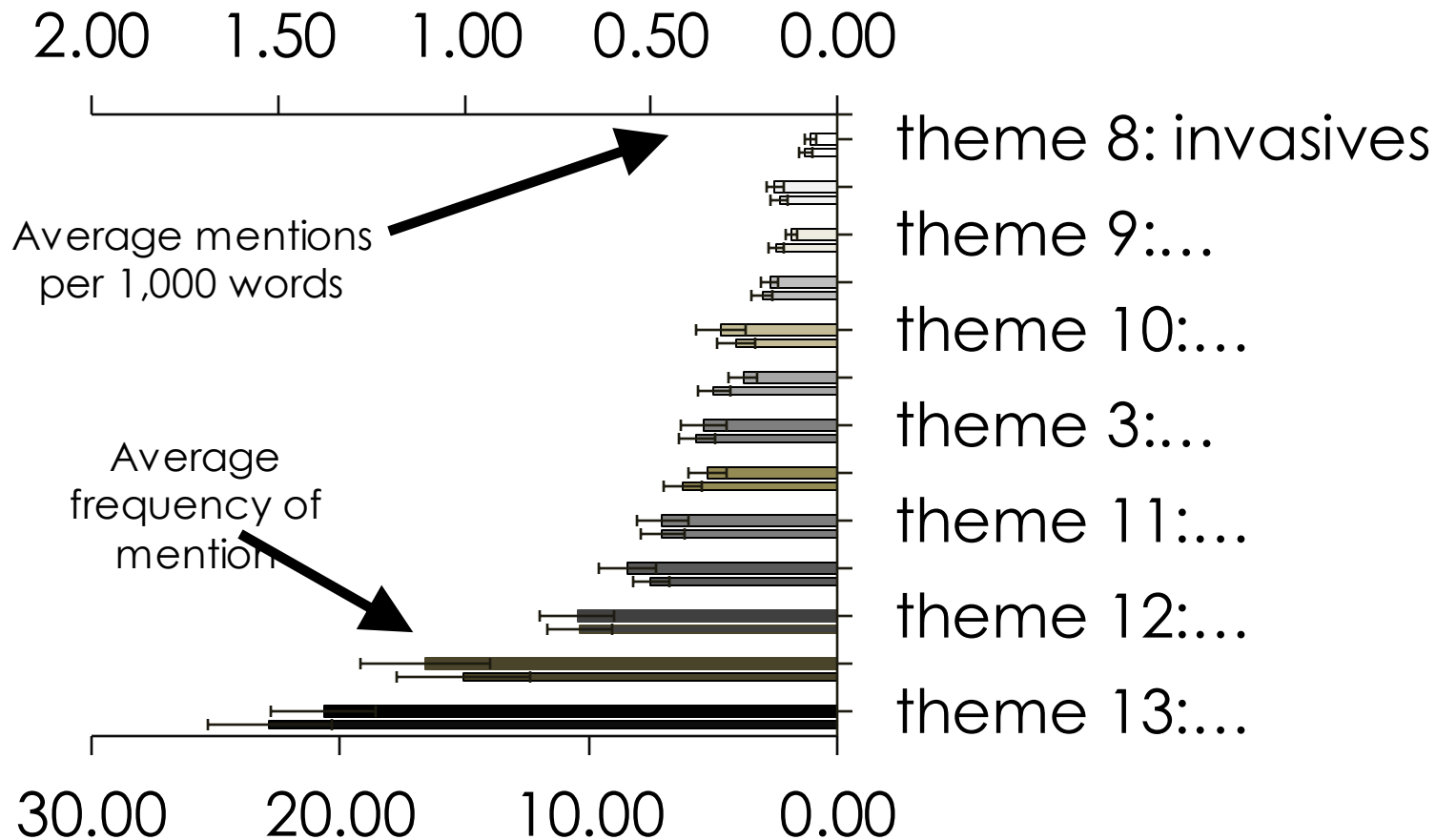




# Canadian UFMP content

$n = 63$

Most **THEMES** are about tree maintenance and admin/law





# Canadian UFMP content

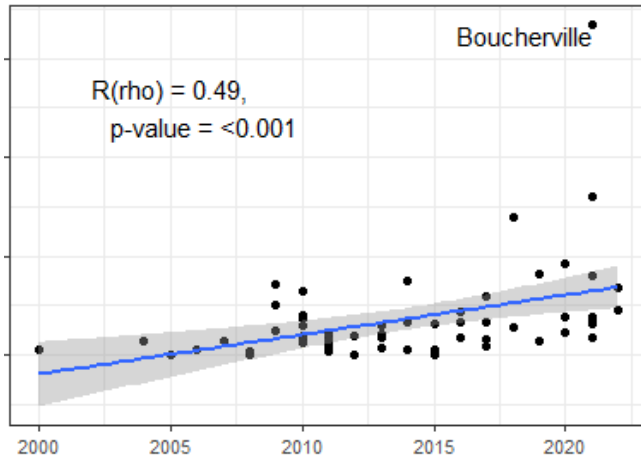
$n = 63$

Tree establishment and climate change

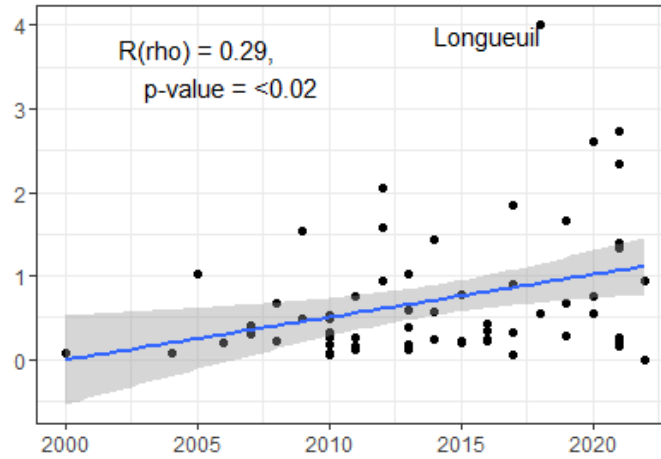
**THEMES** increase over time

mentions per 1,000 words

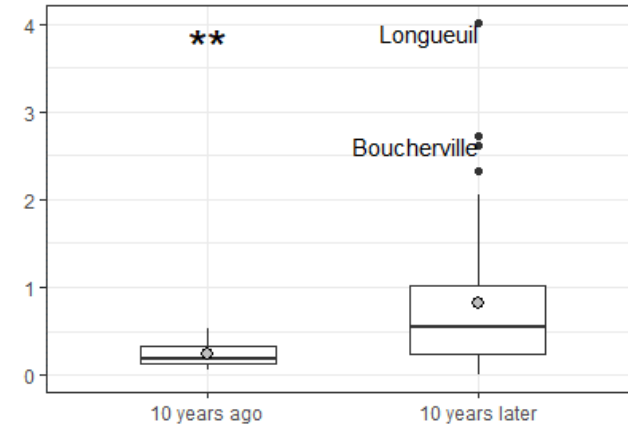
b) theme 3: climatechange



c) theme 12: treeestablish&enhance



e) theme 12: treeestablish&enhance



Year of  
publication



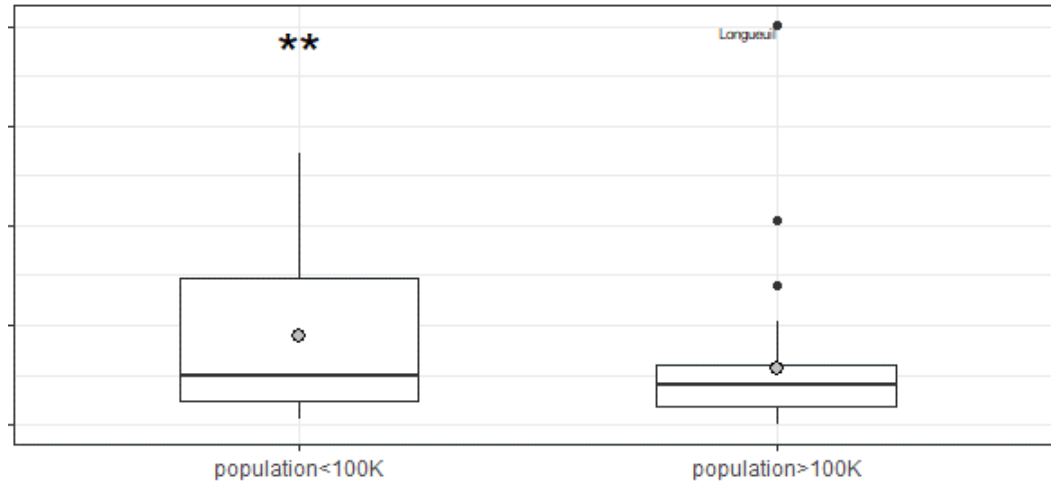
# Canadian UFMP content

$n = 63$

Tree establishment **THEMES** change by population and type of city

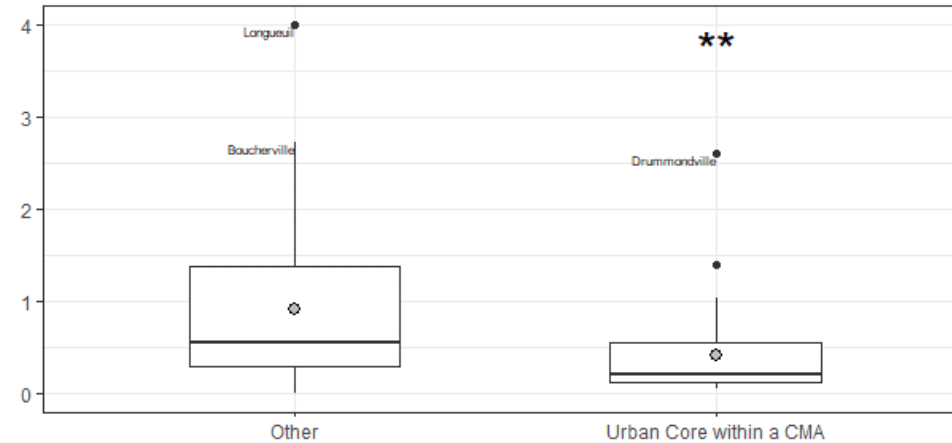
mentions per 1,000 words

d) theme 12: treeestablish&enhance



Population

f) theme 12: treeestablish&enhance



Type of  
municipality

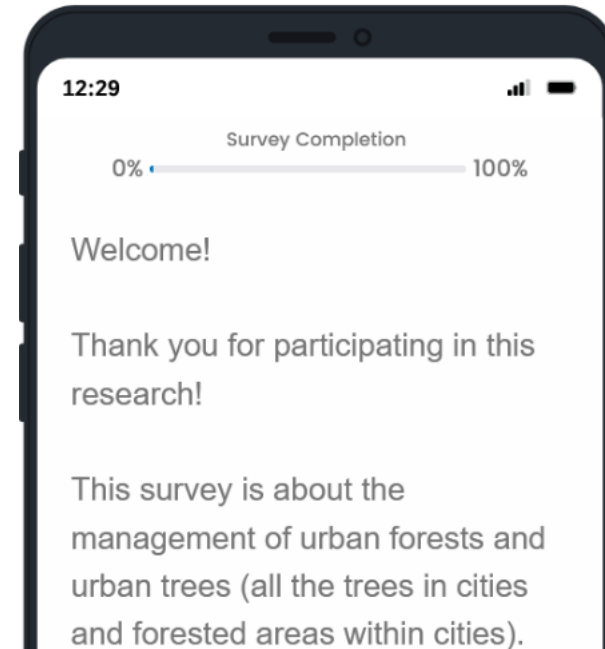


# Views on Canadian UFMP implementation

- Online, targeted survey

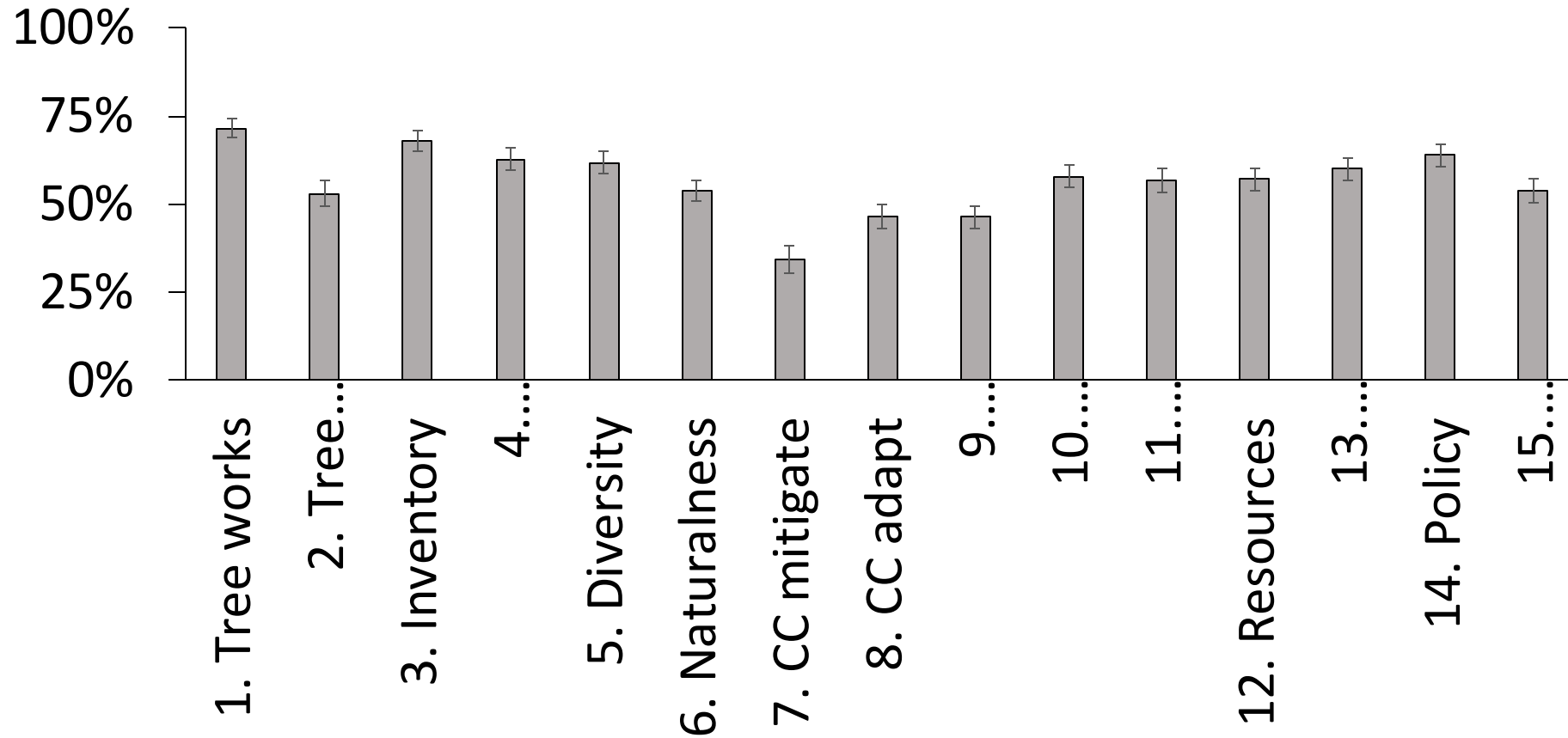
## *Key Features:*

- Urban forest professionals (700+)
- Cities with UFMPs
- 10min to complete
- **Anonymous**
- Questions:
  - UFMP objectives
  - UFMP outcomes
  - UFMP challenges & opportunities



# Views on Canadian UFMP implementation

Climate change **objectives** less achieved



*n=118*

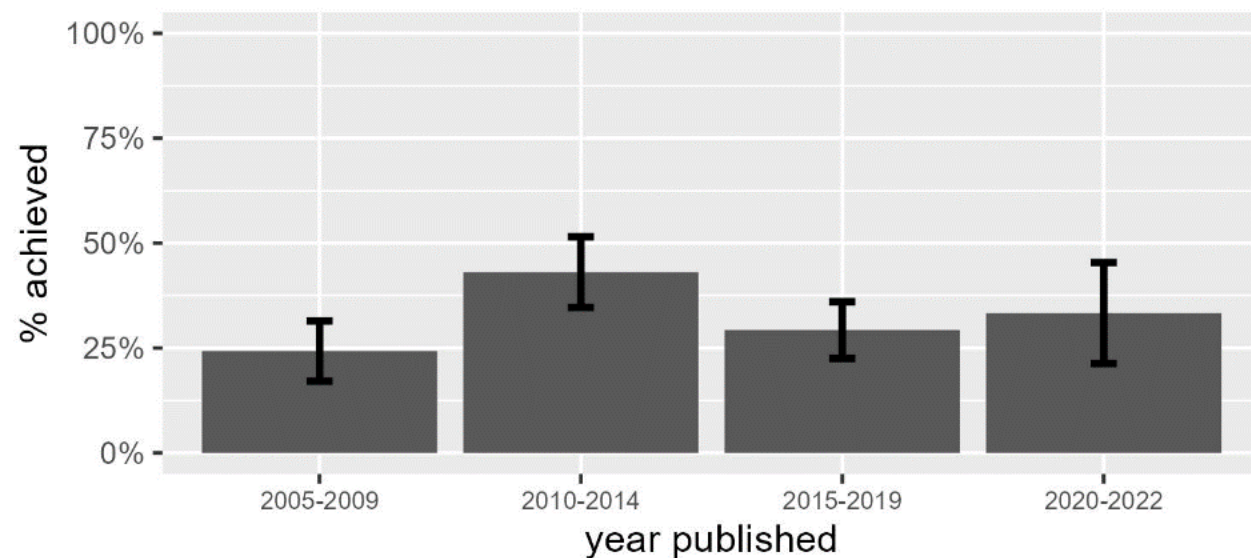


# Views on Canadian UFMP implementation

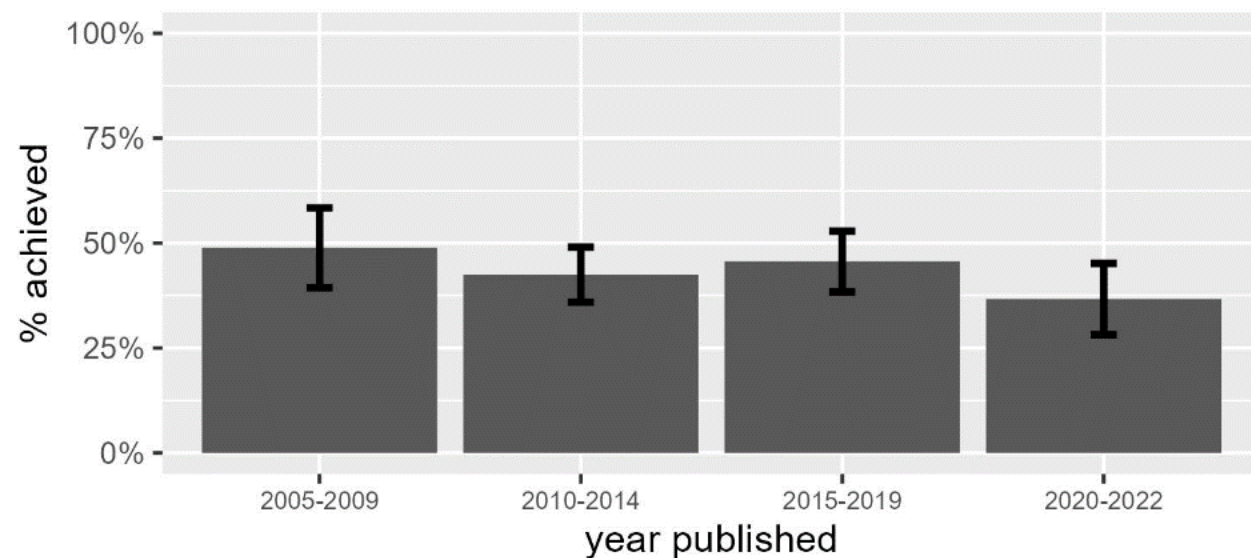
Achievement of climate change **objectives** does not change over time

*n* = 118

i) Year published by level of achievement of objectives: CC mitigate



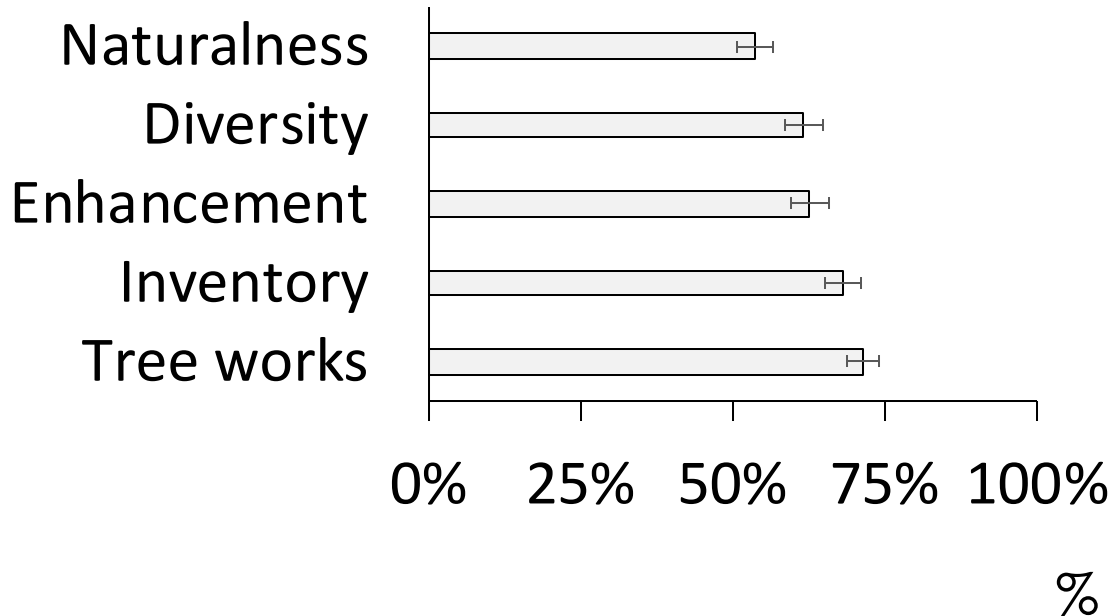
j) Year published by level of achievement of objectives: CC adapt



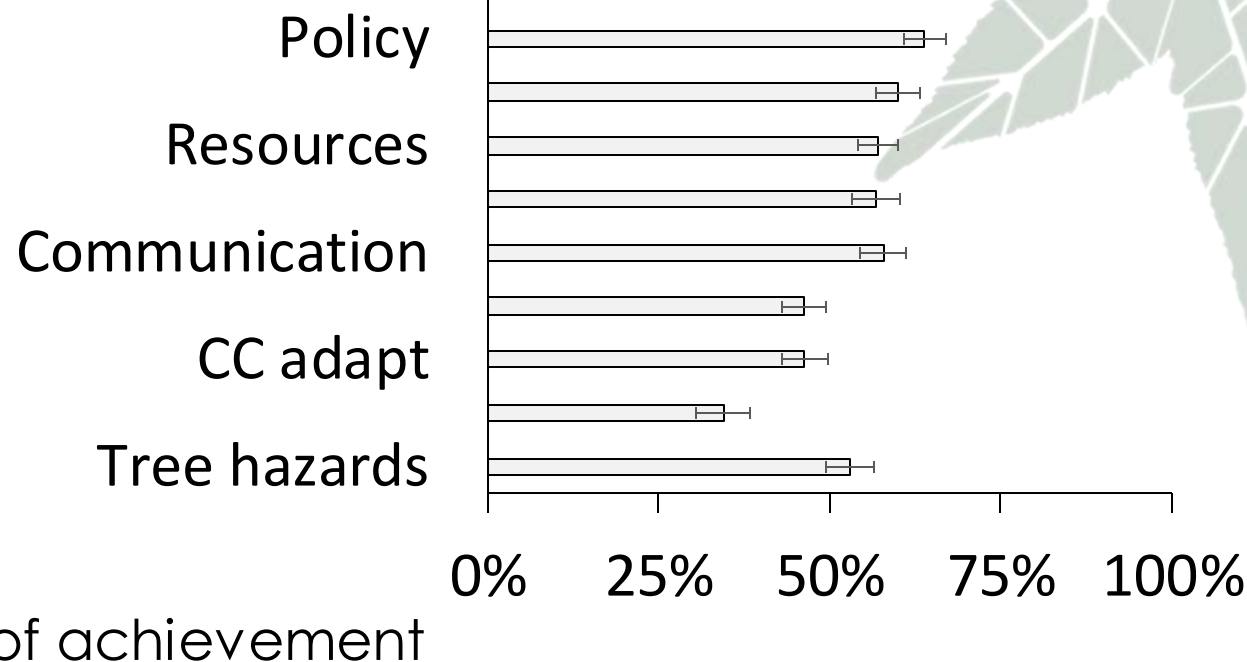
# Views on Canadian UFMP implementation

Different views on **objectives**

Factor: better & more trees



Factor: strategy, community, resources



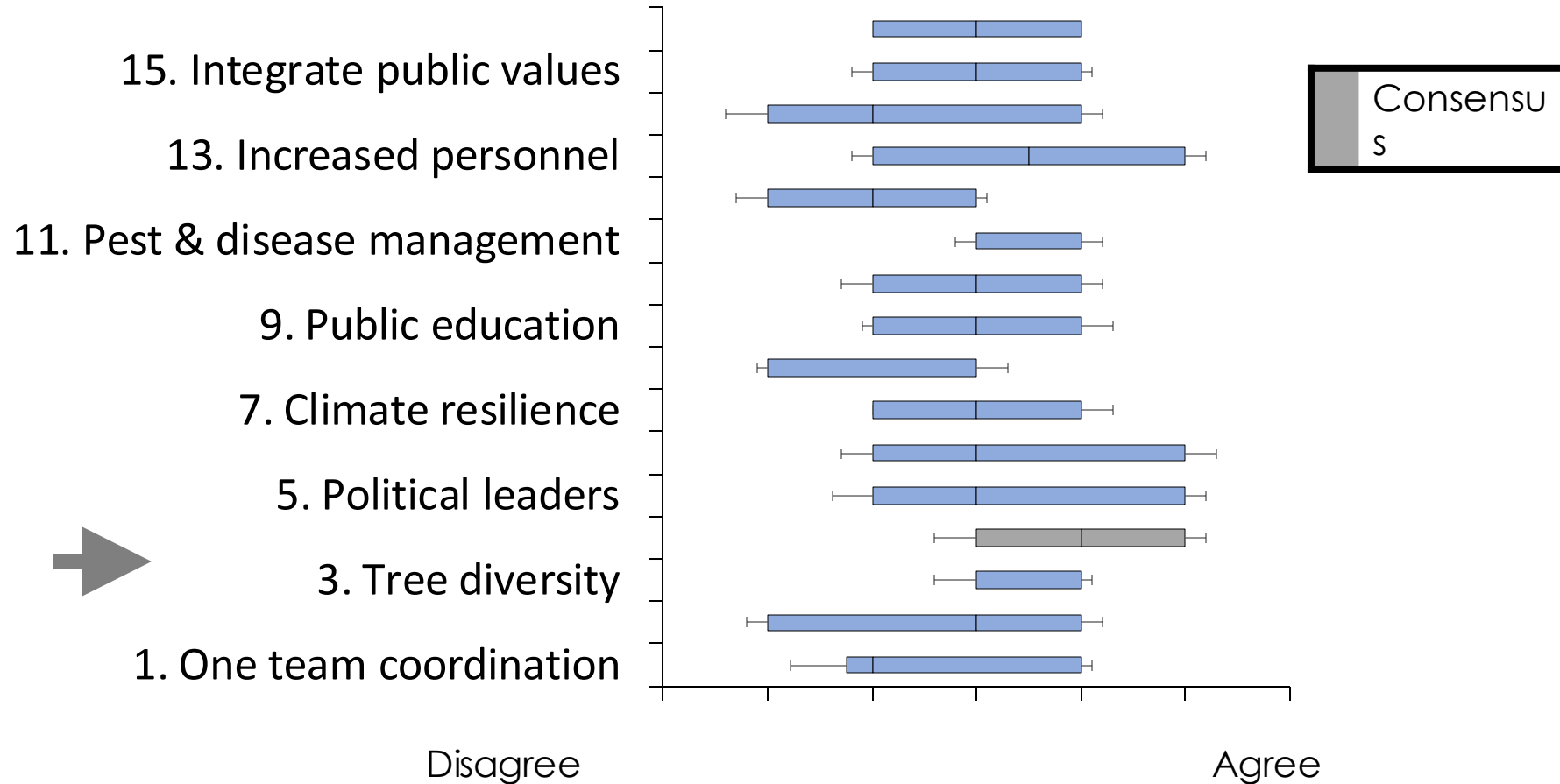
*n* = 118



# Views on Canadian UFMP implementation

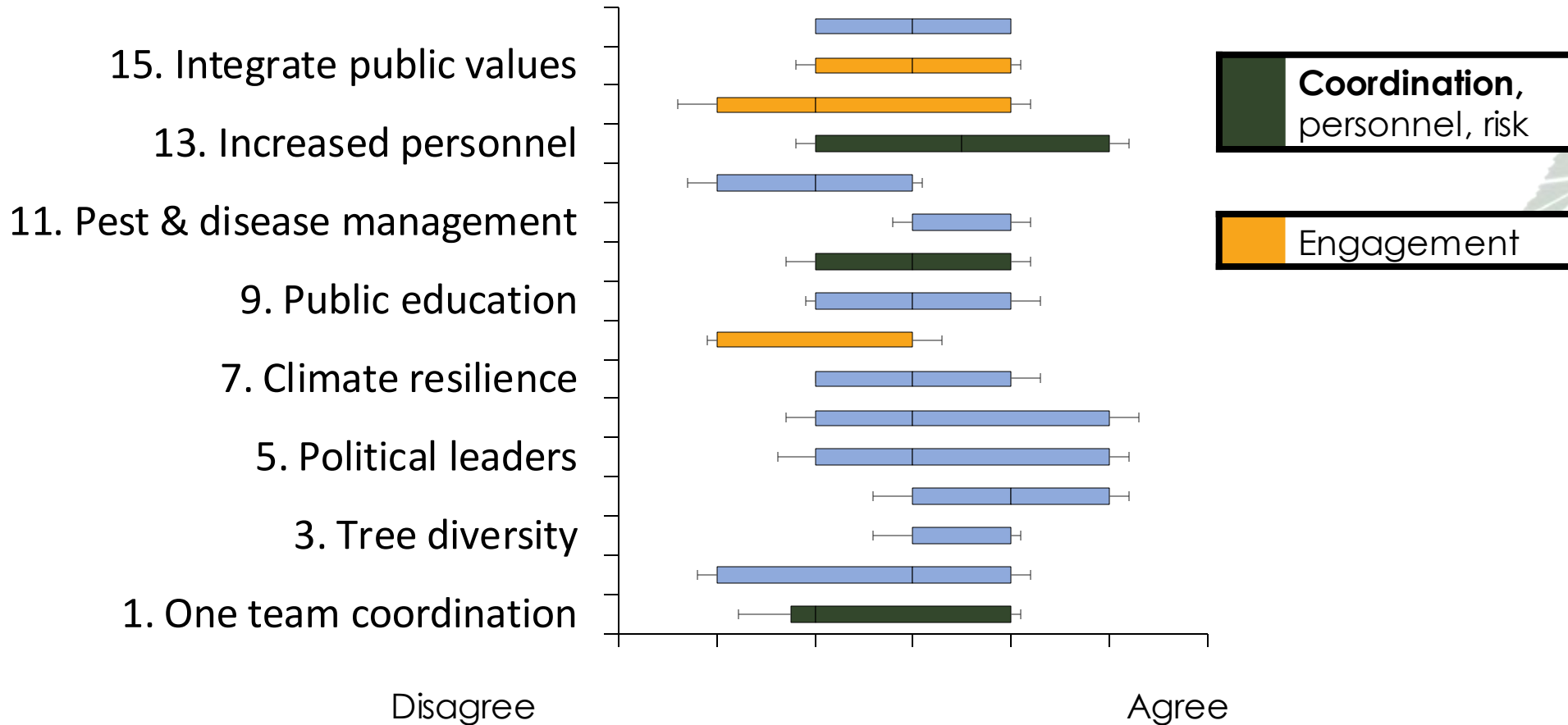
## Different views on **outcomes**

*n* = 118



# Views on Canadian UFMP implementation

## Different views on **outcomes**

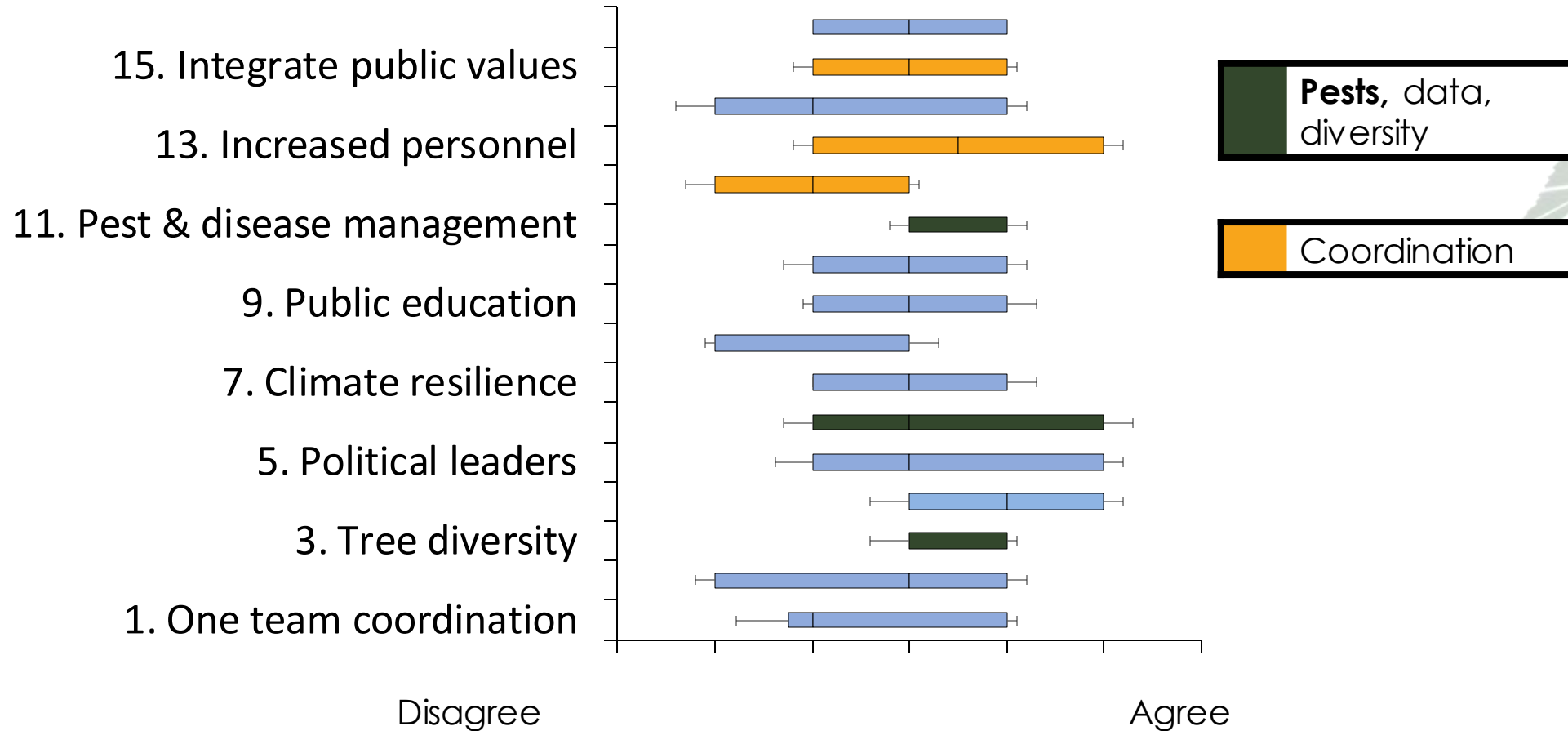




# Views on Canadian UFMP implementation

## Different views on **outcomes**

$n=118$





## *What does this mean?*

1. Shared experiences across Canada managing urban forests
2. Tree planting/enhancement dominates UFMPs, particularly for “small” cities
3. Climate change is mentioned, but not acted on systematically or implemented
4. Increased budgets may increase UFMP implementation
5. Even the most ambitious tree-planting will be challenged by climate change







# Thank you

Camilo Ordóñez Barona |  UNIVERSITY OF  
TORONTO



cordezbar



camilo.ordonez@utoronto.ca



Food and Agriculture  
Organization of the  
United Nations



# **2nd** **World Forum on Urban Forests**

**2023**



**World Forum on  
Urban Forests**





**TREE WEEK:**  
Harnessing the Power of Celebration and  
Connection to Galvanize Tree Champions for  
Climate Resilient Communities



# Heather Wilson

Program Manager, Senior - Urban Forestry – LFUCG, KY  
ISA Certified Arborist KY-0805M, TRAQ Certified

- Tree Week – brief history
- Seeds for Success
- Branching Out - Tree Week's growing impact
- Kentucky's roadmap for replication
- Thank you & Questions





A vertical rectangular image of a green leaf with a white quotation mark. The leaf is split horizontally, with the top half being a lighter green and the bottom half being a darker green. The veins of the leaf are visible. A large white quotation mark is centered on the darker green background.

“

***"Just as a tree relies on its network of roots,  
we thrive through the connections we build  
with one another."***



## Tree Week – brief history

2018: Tree Week kicked off with its first week-long annual celebration dedicated to honoring the roles that trees play in our lives and communities. Several hundred people from all sections of our community attend these tree focused events each year, which include:

- Tree plantings
- Tree giveaways
- Mulching events
- Educational walks/talks
- Arts and cultural events
- Tree climbing competitions
- Academic seminars





# Seeds for Success

Leadership, Community Partners,  
Collaboration & Connection



## Seeds for Success: Beyond Events, creating a network of support

### Engagement in Tree Week provides in-roads to structures of support

- Local non-profits with missions based in ecological and social well being
- Governmental entities and/or higher education programs that offer technical skills and development
- Citizen action networks actively engaging in environmental and volunteer initiatives



LEXINGTON





# TREE WEEK

## ACROSS KENTUCKY!

### Branching Out: Tree Week's Growing Impact



TREE WEEK

TREE WEEK



# Branching out: inspiring new Tree Week celebrations

URBAN FOREST INITIATIVE PRESENTS

## TREE WEEK

LEXINGTON, KY  
OCTOBER 6-15, 2023

**WEEKLONG EVENTS**

**Tree Week - Environmental Board Games**  
140 E. Main St | Lexington Public Library, Central Branch

**Let's Talk About Climate (Map!)**  
Virtual | Climate Conversations

**Visit The Trees of Gardenside Park's Stream Buffer Along Wolf Run Creek**  
Gardenside Park | 1835 Yorktown Road

**The Living Arts & Science Center Discovery Exhibit "Living Connections"**  
The Living Arts & Science Center | 362 North Martin Luther King Blvd

**A Cemetery History In Eight Trees**  
419 E. 7th St | African Cemetery No. 2  
5:30-6:30p on Mon (10/9), Tues (10/10), Wed (10/11)  
African Cemetery No. 2 Inc.

**Campus TREE-mendous Benefits**  
Not open to the public | Fayette County Public Schools  
Mon (10/9) - Friday (10/13)

**ONGOING EVENTS**

**BCTC's Tree-ative Exhibition**  
500 Newtown Pike | BCTC Newtown Campus - Library  
Classroom Building Rm. 120 | Oct. 6 - Nov. 6

**Go See Trees 2023: Reforest the Bluegrass Throughout the Years**  
lexingtonky.gov/go-see-trees | Parks in Lexington  
Sept. 30 - Nov. 6 | LFKC - Division of Environmental Services

**Toyota Biodiversity Trail Walk**  
170 Family Circle | Georgetown, KY | Toyota Biodiversity Trail  
Toyota Motor Manufacturing Kentucky

**TREE WEEK**

**FRIDAY, OCTOBER 6**

**1:00 PM - 2:00 PM** Veterans Park Tree Project 2nd Year Birthday Party for Kids on Fall Break  
1001 Watermill Lane | Veterans Park

**2:00 PM - 3:00 PM** Past as Primer: Climate Clues in Forest History  
Virtual | Pre-registration on Zoom  
Kentucky Climate Consortium

**5:30 PM - 7:30 PM** Tree Week Kick-Off and Signature Tree Planting  
201 Castletown Drive | Castletown Park  
Tree Week Planning Team

**5:30 PM - 7:30 PM** Conjure an Exhibition of Photographs Celebrating the Natural World  
209 Castletown Drive | Historic Loudon House at Castletown Park  
Lexington Art League

BEREA 2023  
TREE WEEK

EVENTS OCTOBER 7TH-15TH ALL ARE FREE

**7th-Saturday:**  
-Tree ID Hike at the Pinnacles, Forestry Outreach Center, 1:00pm  
Learn about the trees that surround us during our group hike  
-City of Berea Tree Week Kickoff, Chestnut St. Pavilion, 5:30-7:30pm  
Enjoy a tree planting, kids activities, snacks, and live music

**8th-Sunday:**  
-The Lorax Party, Forestry Outreach Center, 2:00-3:30pm  
Geared towards young children, story time, snacks, activities

**9th-Monday:**  
-Walk at Brushy Fork, meet at Alumni Patio, 1:00pm  
A gentle, student-led group hike

**10th-Tuesday:**  
-Mulch Madness! Tree Mulching at the Pinnacles, 3:30-5:00pm  
Help us protect trees in the lower forest by spreading mulch  
-Clear Day Thunder film and Q&A, Carter G. Woodson Center in the Alumni Building, 5:30pm  
View the film and learn about American Chestnut trees

**11th-Wednesday:**  
-Clear Day Thunder film and Q&A, Forestry Outreach Center, 6:00pm  
View the film and learn about American Chestnut trees

**12th-Thursday:**  
-Nature R&R at Brushy Fork, meet at Alumni Patio, 3:00-5:00pm  
A slow-paced, relaxing and restorative forest experience

**13th-Friday:**  
-Painting in the Forest, meet at Alumni Patio, 4:00-6:00pm  
Students, relax by creating a painting while in nature

**14th-Saturday:**  
-Solar Eclipse Viewing, Forestry Outreach Center, 12:00-3:00pm  
Thanks to the Pinnacle Astronomy Club

**15th-Sunday:**  
-Painting with Natural Dyes, Forestry Outreach Center, 2:00pm  
BEREA CITY OF BEREA

WATCH FOR AN ART INSTALLATION OF TREE IDENTIFICATION SIGNS AT THE PINNACLES AND TREE PLANTINGS ON CAMPUS AND AT BEREA COMMUNITY SCHOOL

## tree week

Celebration

October 6-15, 2023

A CELEBRATION OF TREES AND ALL THE WAYS TREES AFFECT OUR LIVES!

## TREE WEEK

OCTOBER 7-14, 2023

14 • PADUCAH TREE WEEK EVENTS

to find out what's happening during Paducah Tree Week

Kentucky Community & Technical College  
kentucky.kctcs.edu • 270-534-3435

member of the Kentucky Community and Technical College System (KCTCS),  
an equal educational and employment opportunity institution.

PRESENTED BY TREESLOUISVILLE

## TREE WEEK

-LOUISVILLE-

OCTOBER 7-14, 2023

MULTITUDE OF WAYS THEY BENEFIT OUR LIVES! ENJOY A WEEK-LONG SERIES OF FAMILY-FRIENDLY OPPORTUNITIES ACROSS JEFFERSON COUNTY, INCLUDING TREE ADOPTIONS, TREE PLANTINGS, WALKS, SCAVENGER HUNTS, FILM SHOWINGS, GUEST SPEAKER SESSIONS, AND K-12 PROGRAMMING.

MORE OR TO HOST YOUR OWN TREE WEEK EVENT, VISIT TREESLOUISVILLE.ORG

TREES Louisville



## Roadmap for Replication

### Planning & Organization

- **Assemble** a dedicated planning team made up of committed volunteers representing different backgrounds, interests, and expertise (e.g. Tree Week Planning Team).

### Community Engagement

- **Engage** community members within and outside of your area, both as participants and event hosts. Create opportunities for sharing ideas and fostering collaboration.

### Program Development

- **Develop** the foundational programs and partnerships that will provide a consistent structure to Tree Week each year (e.g. kick-off, proclamation, school involvement, etc.)



## Roadmap for Replication

### Resources & Administration

- **Provide** administrative support to the groups involved. Have shared location where information about events will be organized and presented.

### Promotion & Outreach

- **Establish** recognizable and consistent branding. Share outreach materials across new and existing community networks and various forms of media.

### Evaluation & Improvement

- **Collect** feedback from event hosts and participants via survey and testimonial. Pay specific attention to recurring barriers to inclusion.





## Thank you

Special thanks to all the people and our community partners who make Tree Week a success

- Tree Week - <https://ufi.ca.uky.edu/treeweek>
- Heather Wilson
  - [hwilson@lexingtonky.gov](mailto:hwilson@lexingtonky.gov)
  - 200 E Main St.
  - Lexington, KY 40507

URBAN FOREST INITIATIVE PRESENTS

# TREE WEEK

?Questions?





# **2nd** **World Forum on Urban Forests**

**2023**



**World Forum on  
Urban Forests**



# 2nd World Forum on Urban Forests

Washington DC, 2023

The Key to Resilient Cities and Climate Adaptation

## Surveying German Attitudes Towards Urban Green Spaces



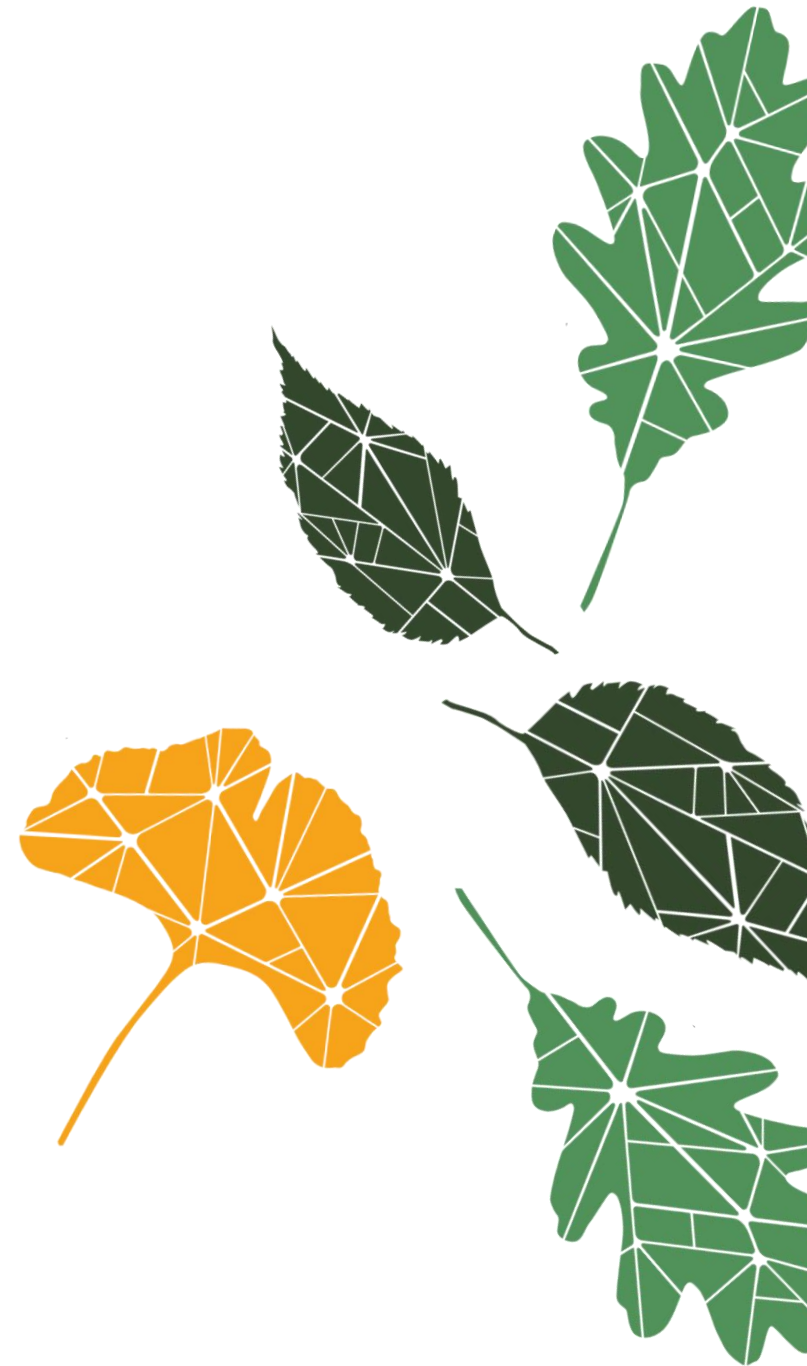
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Presented by

Rita Sousa-Silva

YAS, University of Freiburg, Germany

CML, Leiden University, The Netherlands





A photograph of a park scene. In the foreground, there is a grassy area with a small, empty metal bench. In the background, there is a dense line of trees, including several tall, thin evergreens and some deciduous trees with green foliage. The sky is blue with some light clouds. The image is framed by dark, out-of-focus pine branches in the upper corners.

# THE ROLE OF URBAN GREEN SPACES IN MITIGATING HEAT STRESS

Rita Sousa-Silva & Chad Zanolco



12:01 p.m. ET, July 19, 2022

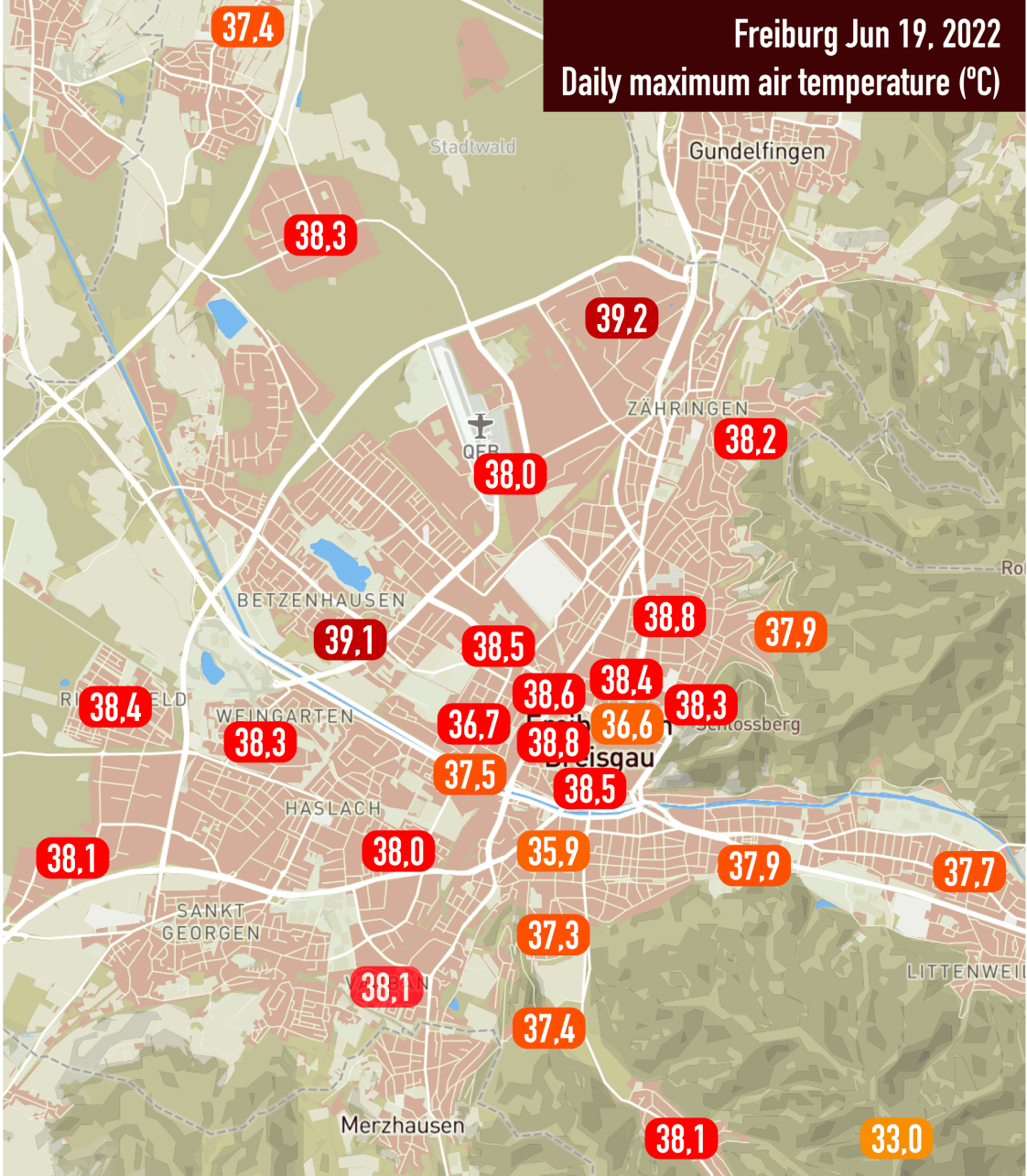
## Germany records hottest day of the year

From CNN's Nadine Schmidt



People cool down in the city center of Cologne, Germany, on July 19. (Sascha Steinbach/EPA-EFE/Shutterstock)







# Over 20,000 died in western Europe's summer heatwaves, figures show

**This year's temperatures would have been virtually impossible without climate crisis, scientists say**

Sandra Laville

Thu 24 Nov 2022 11.12 GMT



📷 A firefighter tackles a blaze in a wheat field in the province of Zamora, Spain, in July.  
Photograph: Isabel Infantes/Reuters

More than 20,000 people died across western **Europe** in this summer's heatwaves, in temperatures that would have been virtually impossible without climate breakdown, figures show.



# Doubling trees in European cities could prevent thousands of deaths

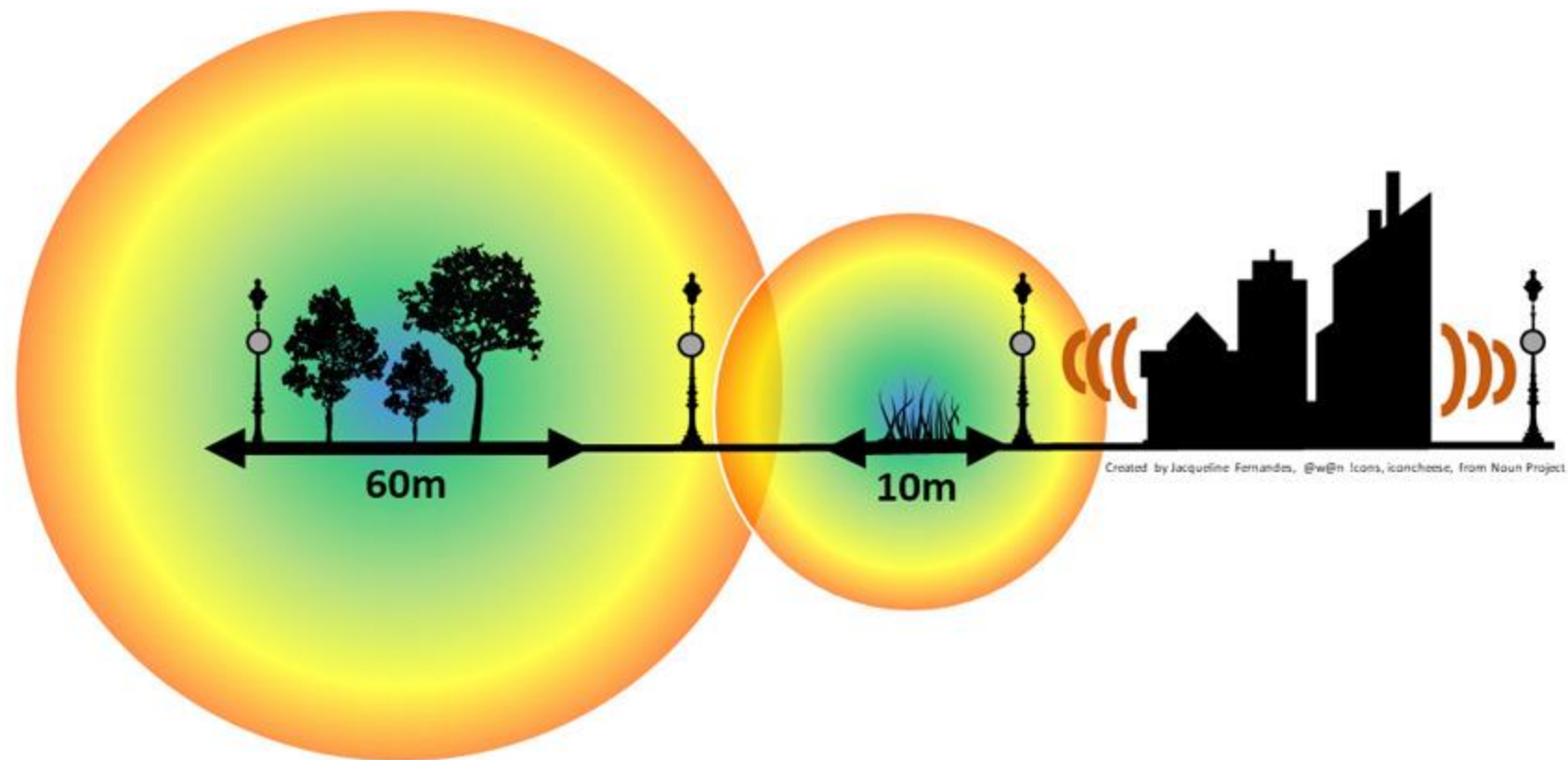
A modelling study of 93 European cities suggests that more than 2600 human heat-related deaths over just three months could have been prevented if these places increased their average tree coverage from 15 per cent to 30 per cent



**ENVIRONMENT** 31 January 2023

By [Madeleine Cuff](#)





### Green spaces' cooling effect



↑  
Lower temperature; Higher relative humidity



Land-cover's distance of influence



Urban heat island



A photograph of a park scene. In the foreground, there is a grassy area with some dry patches. A single metal bench is positioned in the middle ground. Behind the bench is a large, open grassy field. In the background, there is a dense line of trees with green foliage. The sky is blue with some light clouds. The image is framed by dark, out-of-focus pine branches in the top corners.

CAN URBAN GREEN SPACE BE A LEVER WE CAN PULL  
TO MITIGATE URBAN HEAT AT LOCAL SCALES?

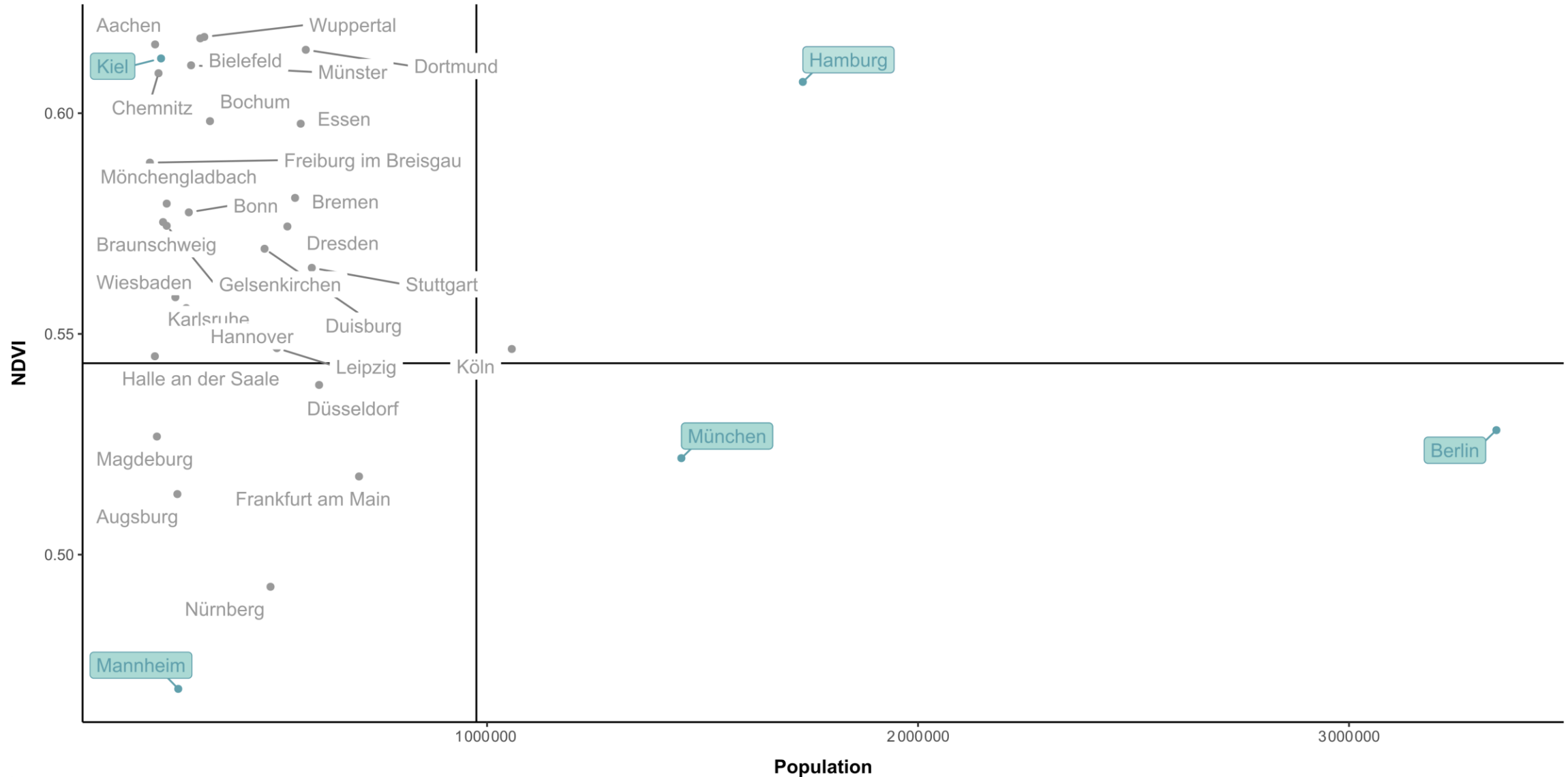


# STUDY POPULATION



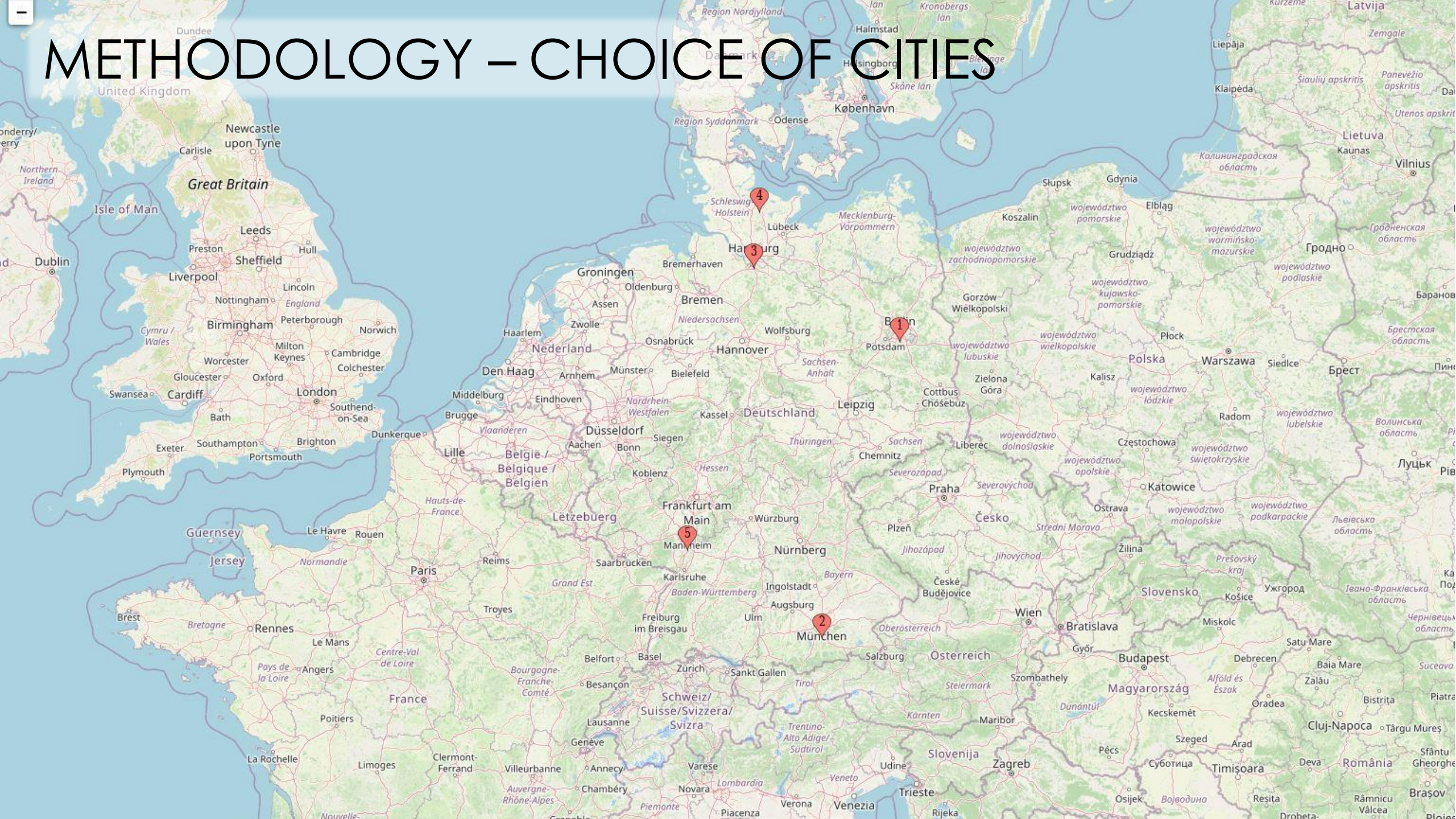


# METHODOLOGY – CHOICE OF CITIES





# METHODOLOGY – CHOICE OF CITIES







USE OF GREEN SPACE

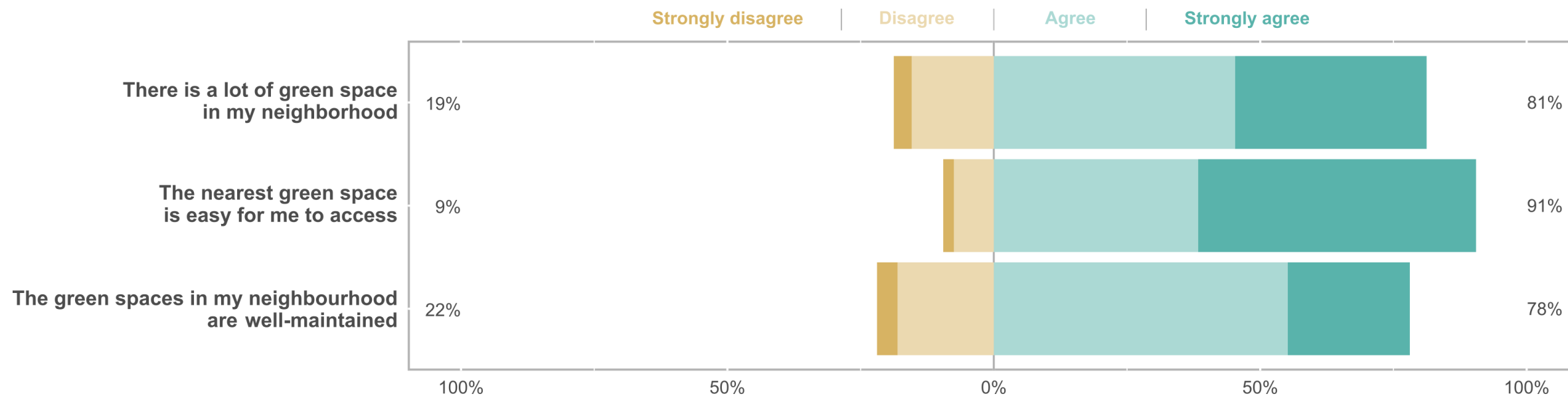


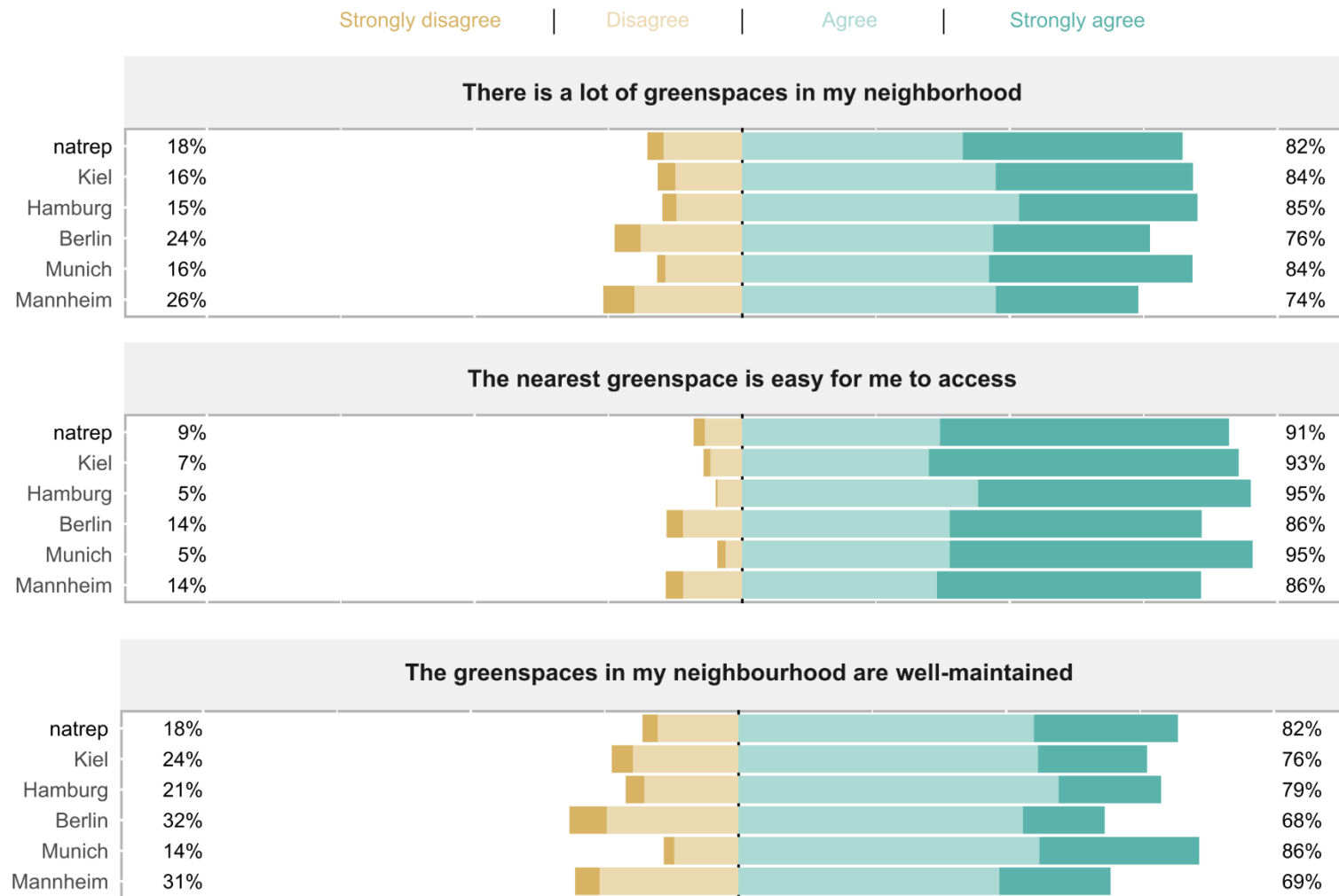




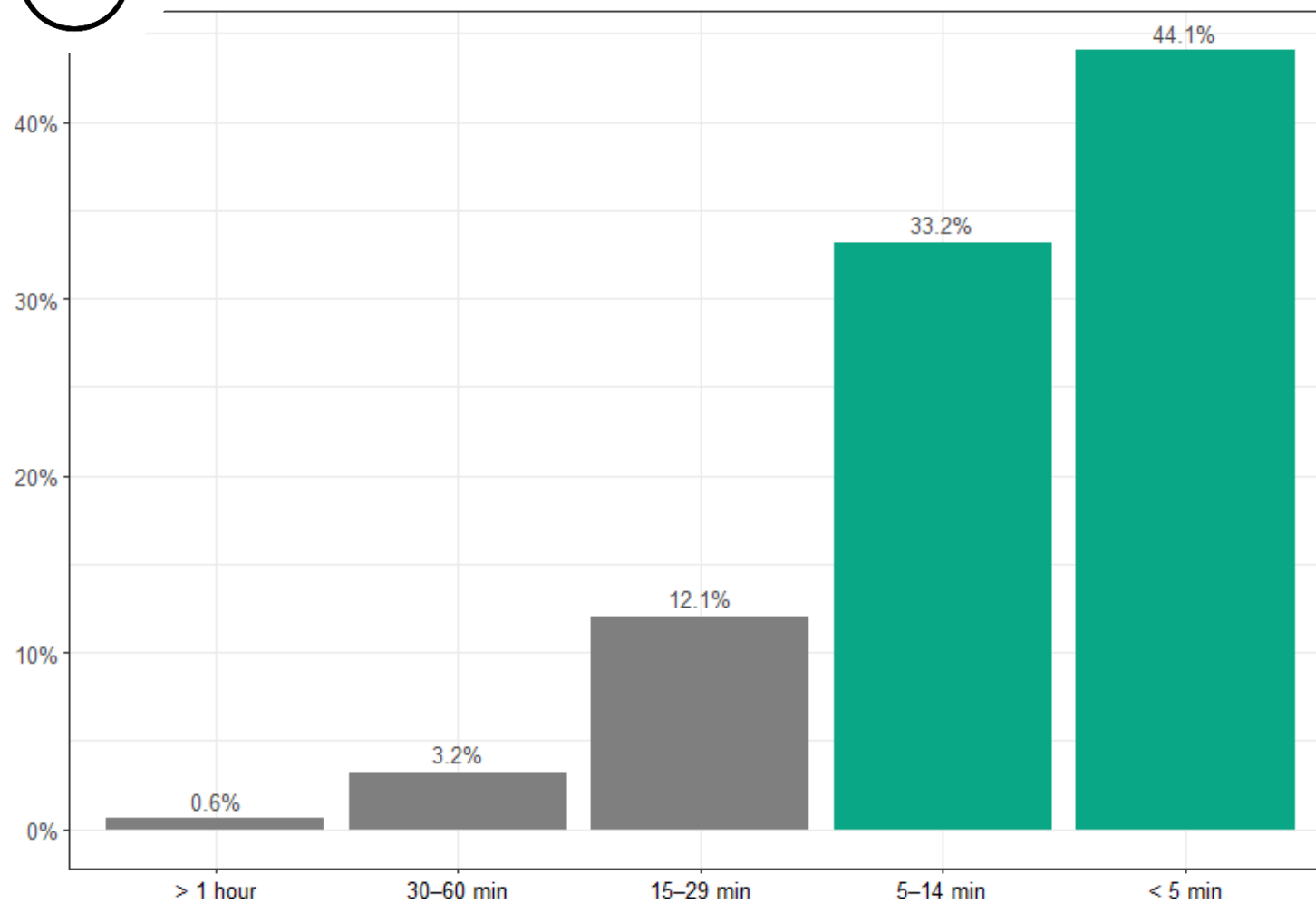
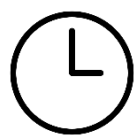
“ Areas with vegetation in public and private areas, including parks, gardens, lawns, tree alleys, green roofs, cemeteries, etc.”













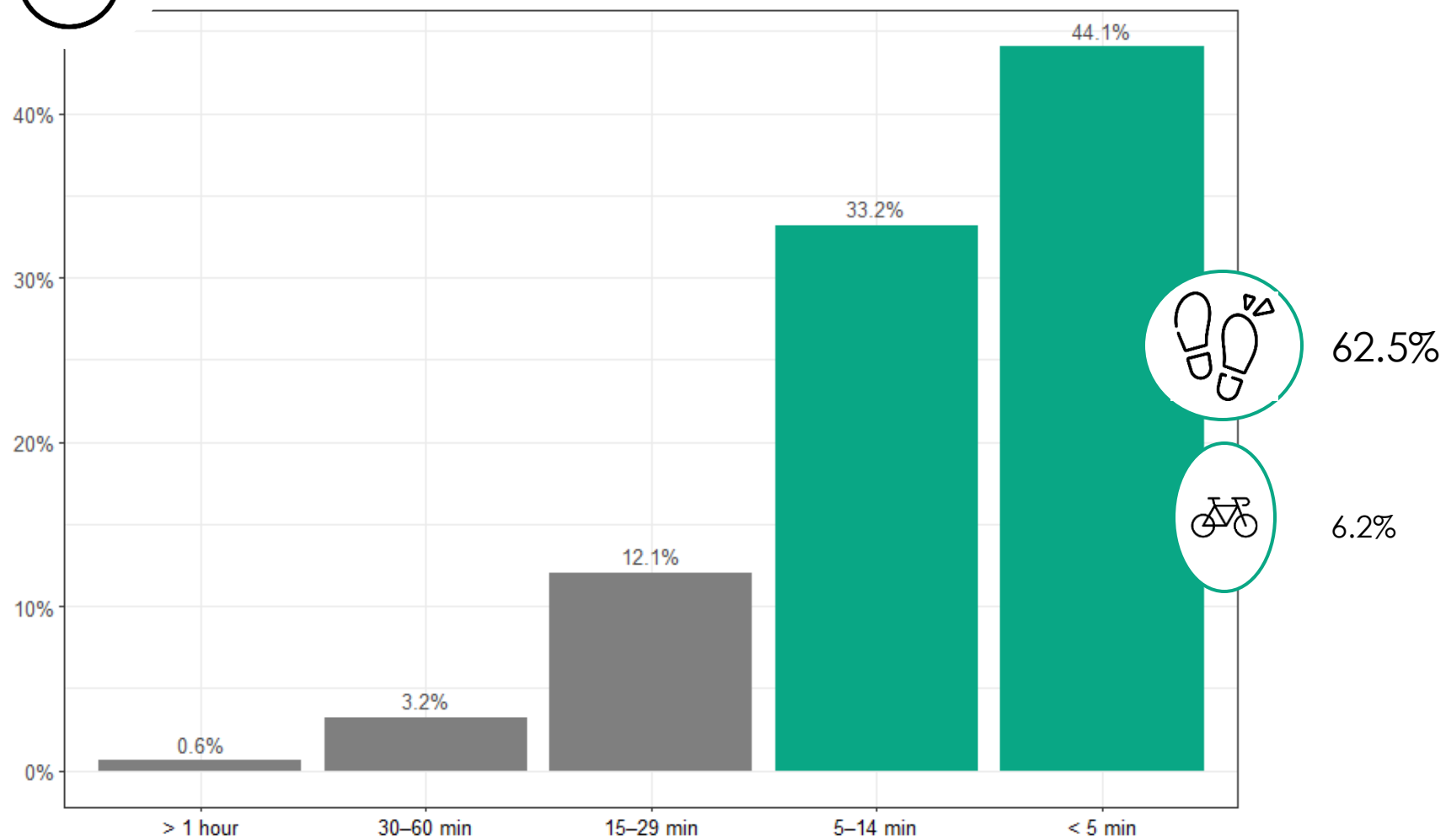
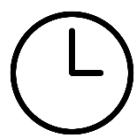
## 2nd World Forum on Urban Forests

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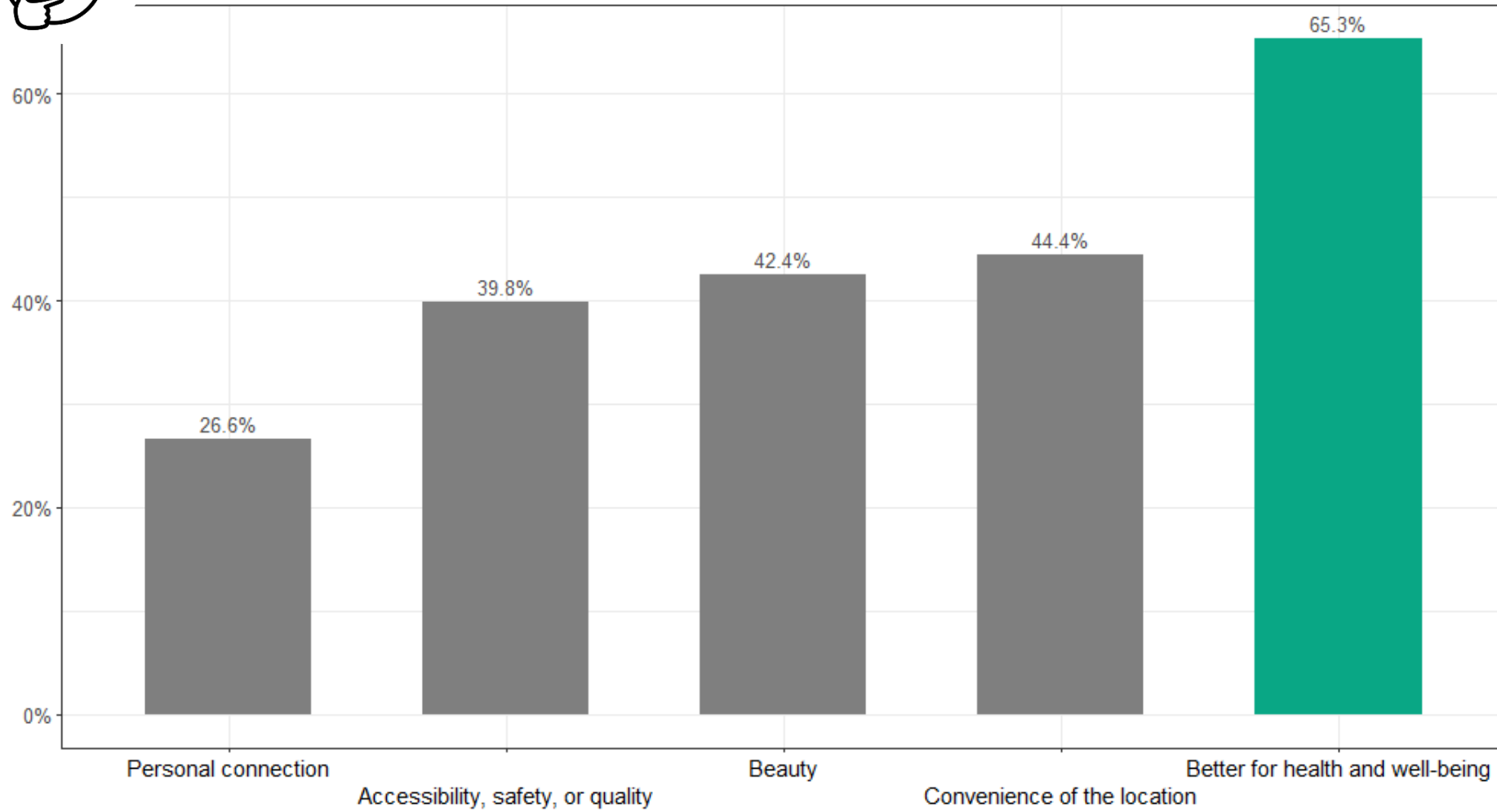


## 2nd World Forum on Urban Forests

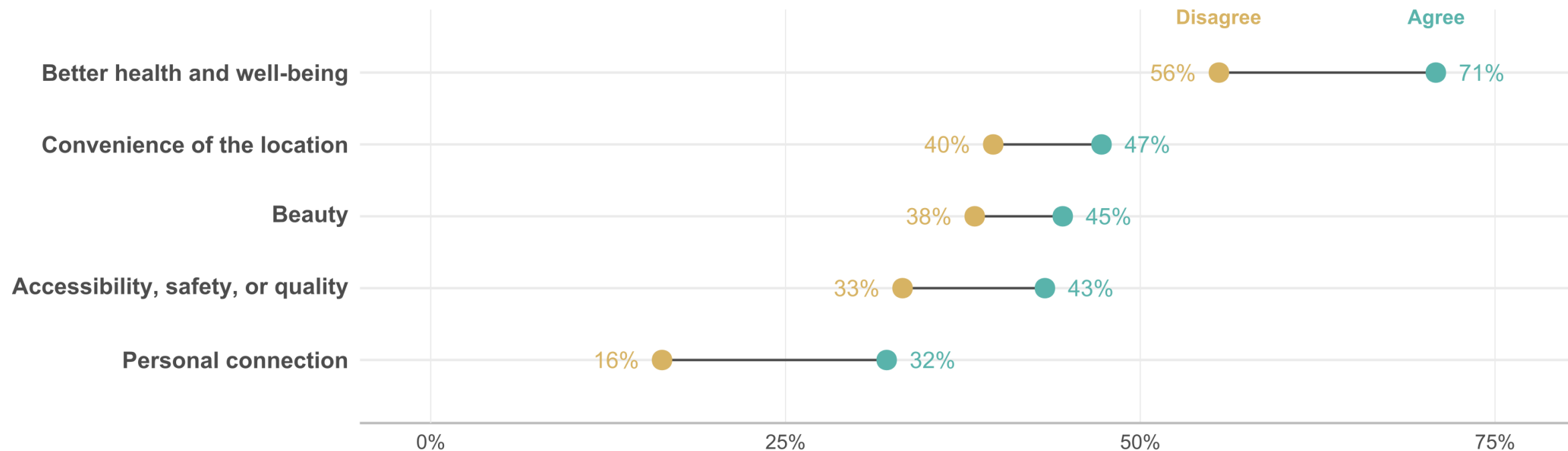
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I spend a lot of time in green spaces...







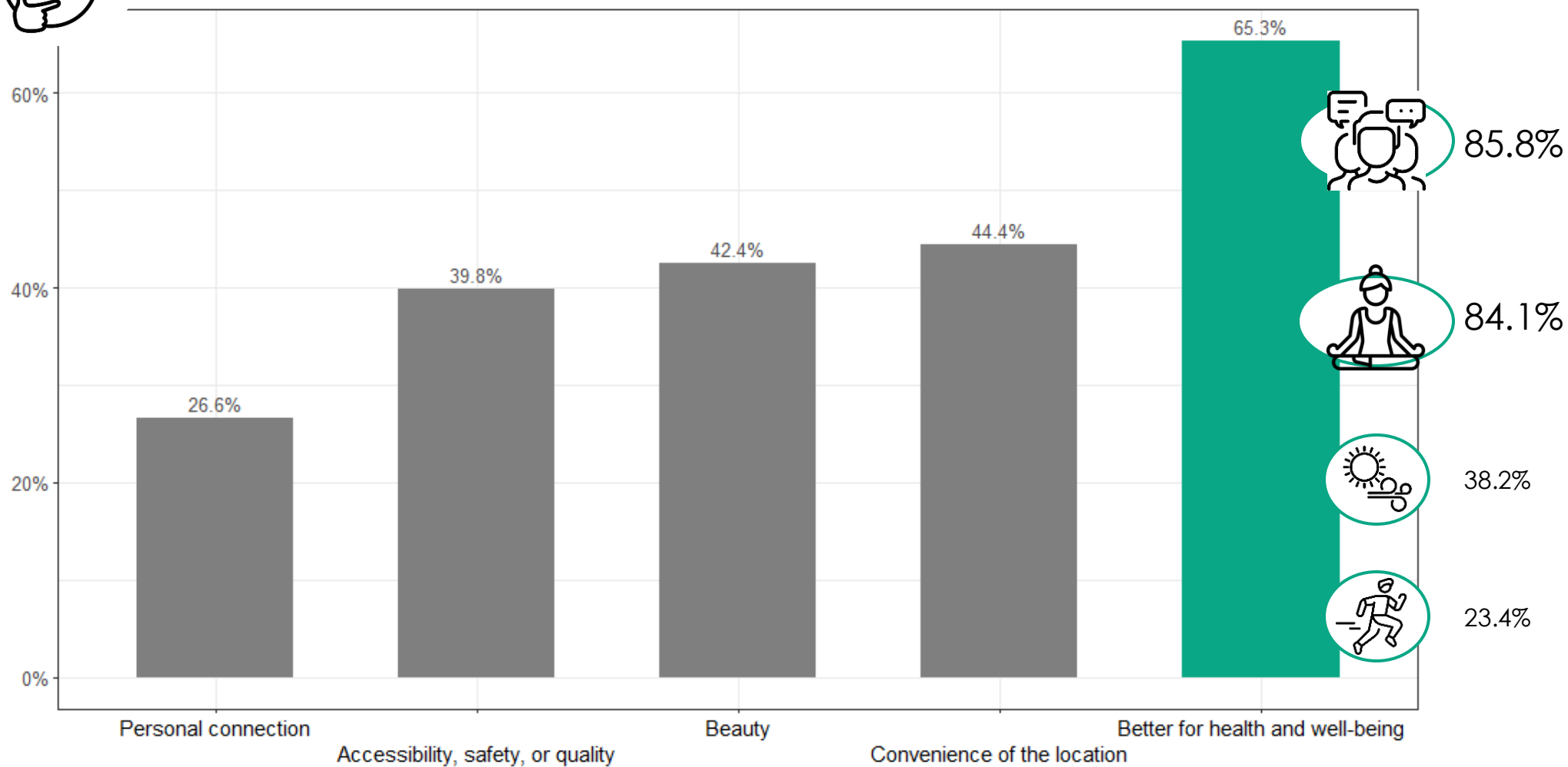
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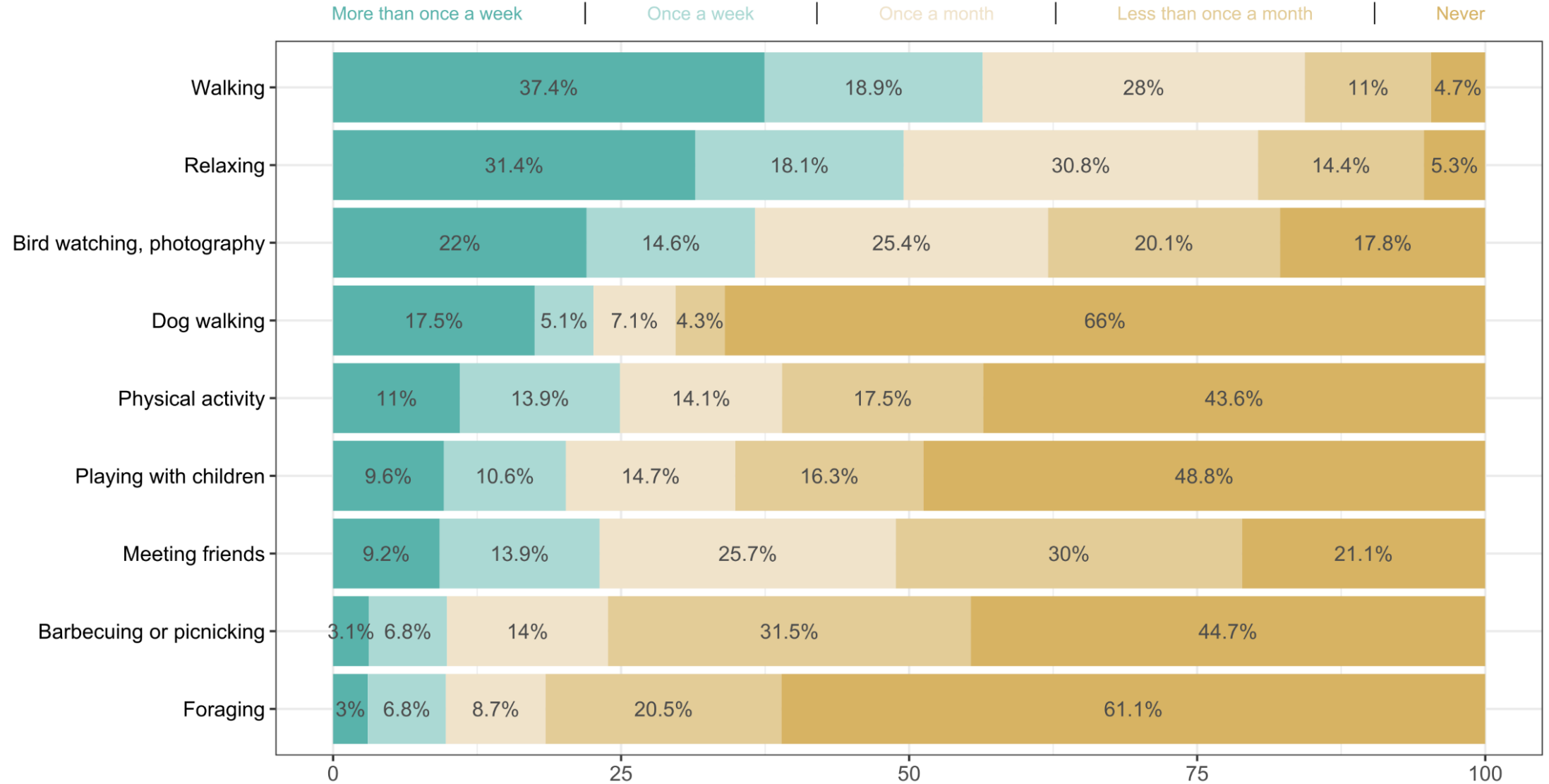


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7







USE OF URBAN GREEN SPACE  
DURING VERY WARM DAYS





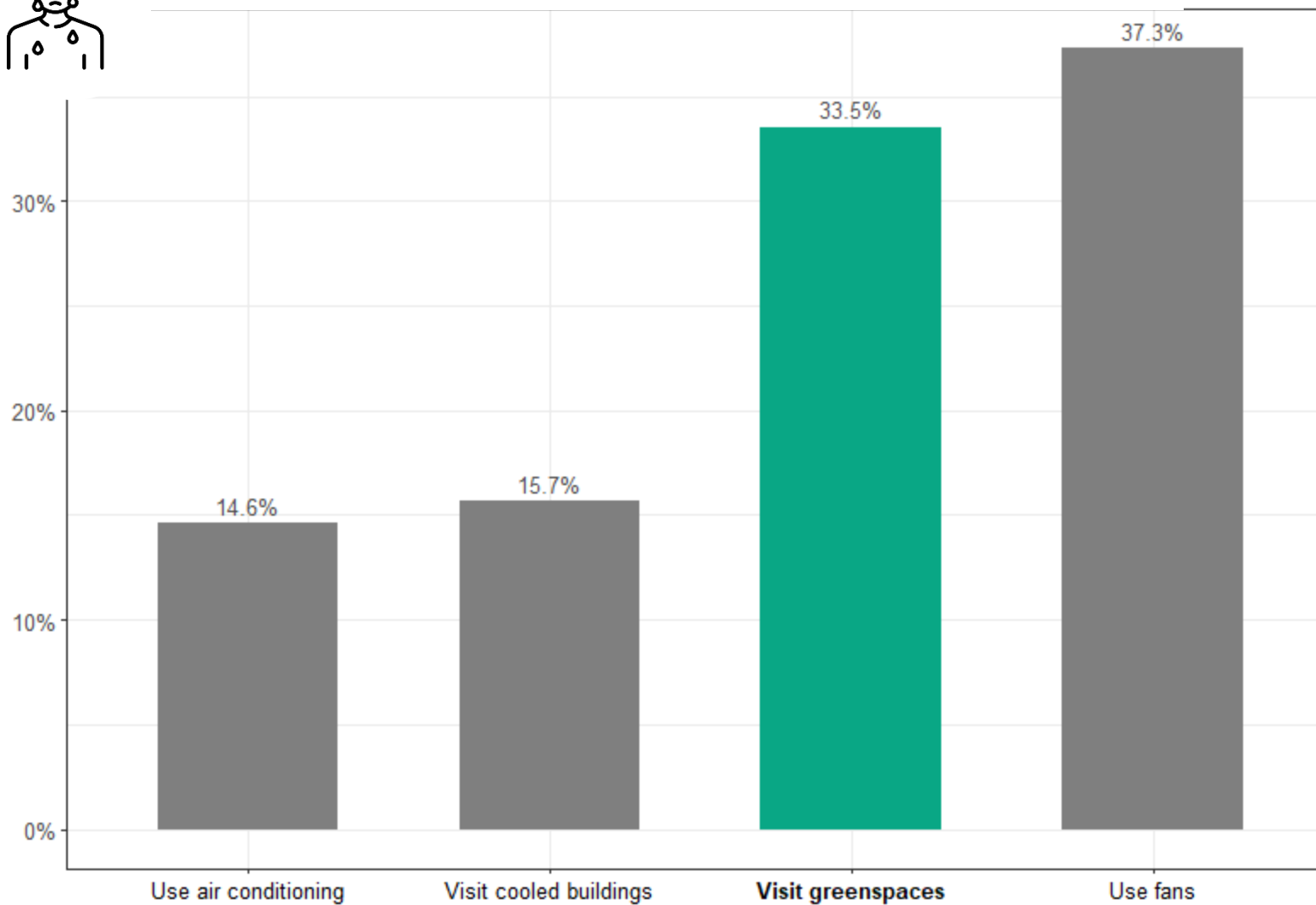
## 2nd World Forum on Urban Forests

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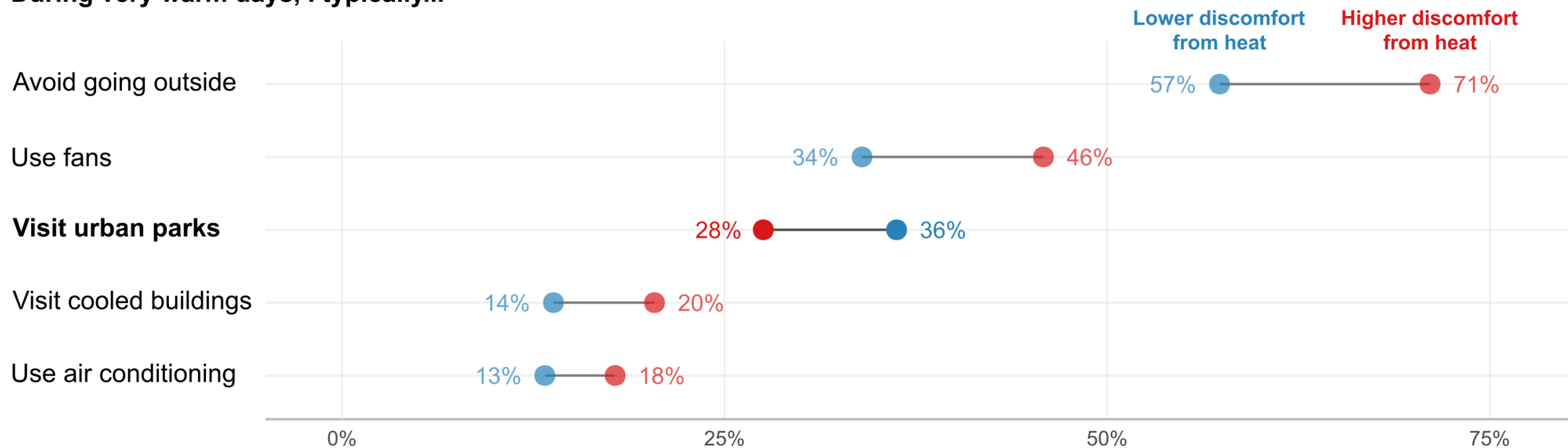
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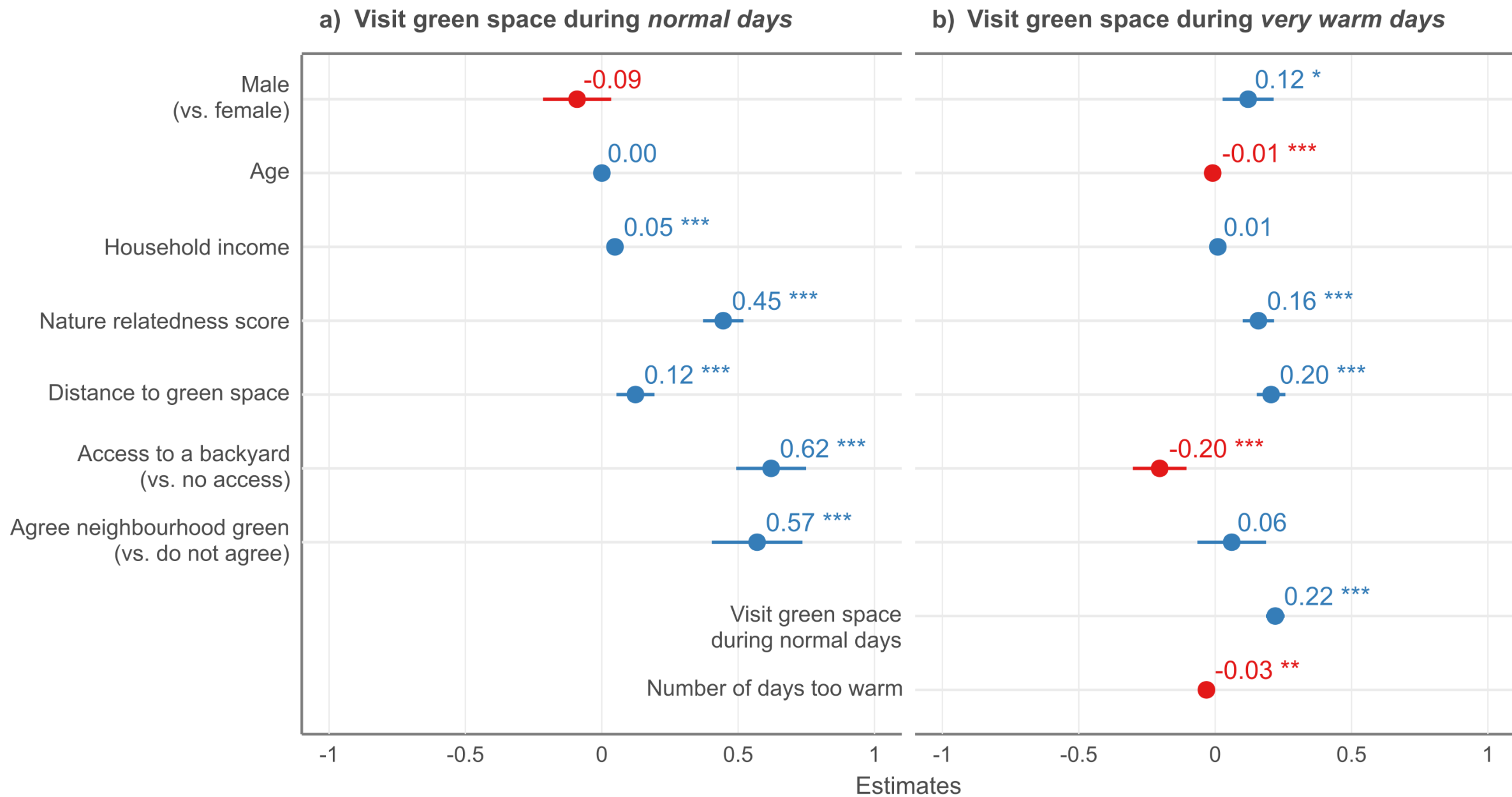
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## During very warm days, I typically...









SUPPORT FOR POLICIES





## 2nd World Forum on Urban Forests

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Strongly disagree

Disagree

Neutral

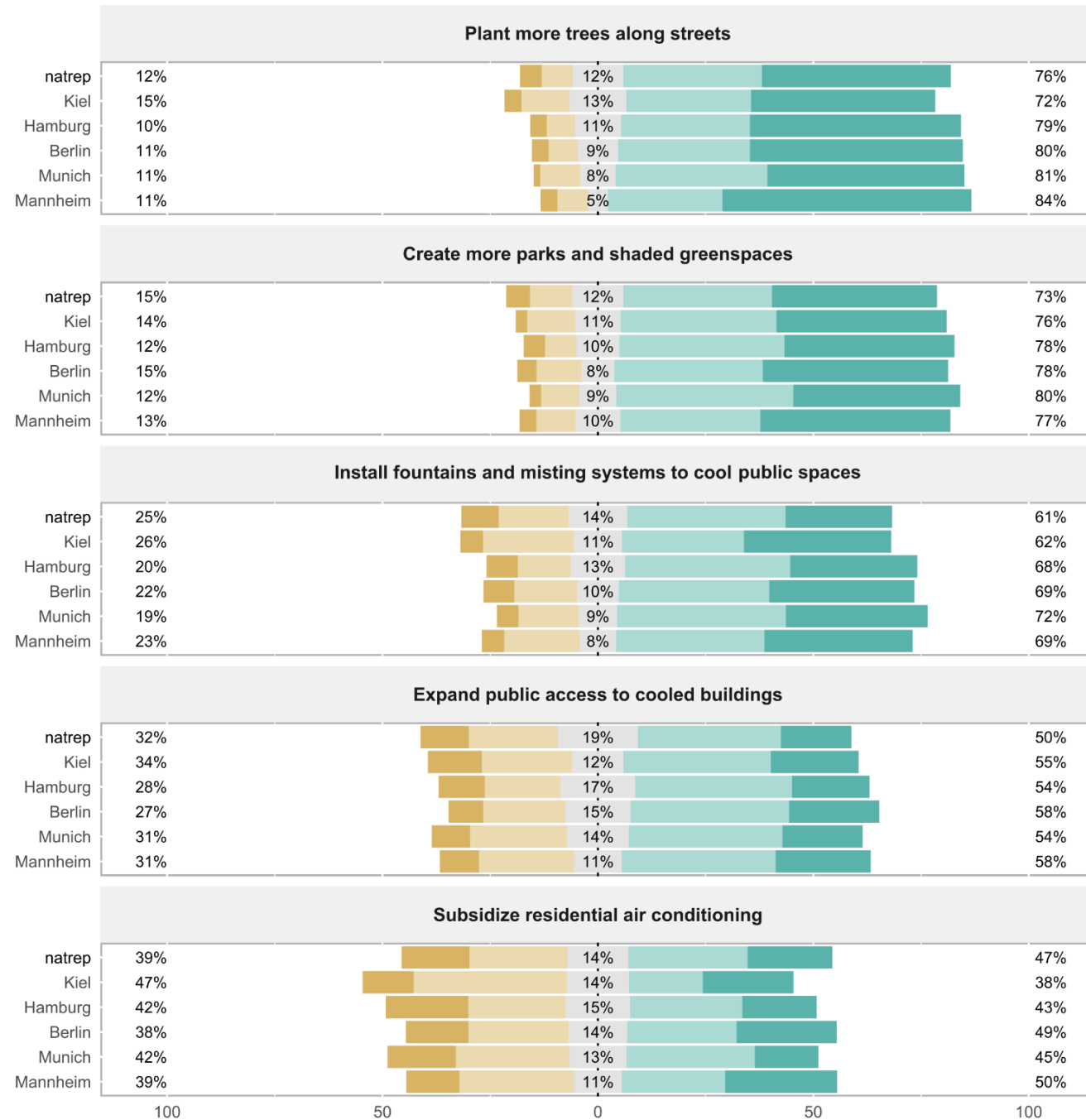
Agree

Strongly agree

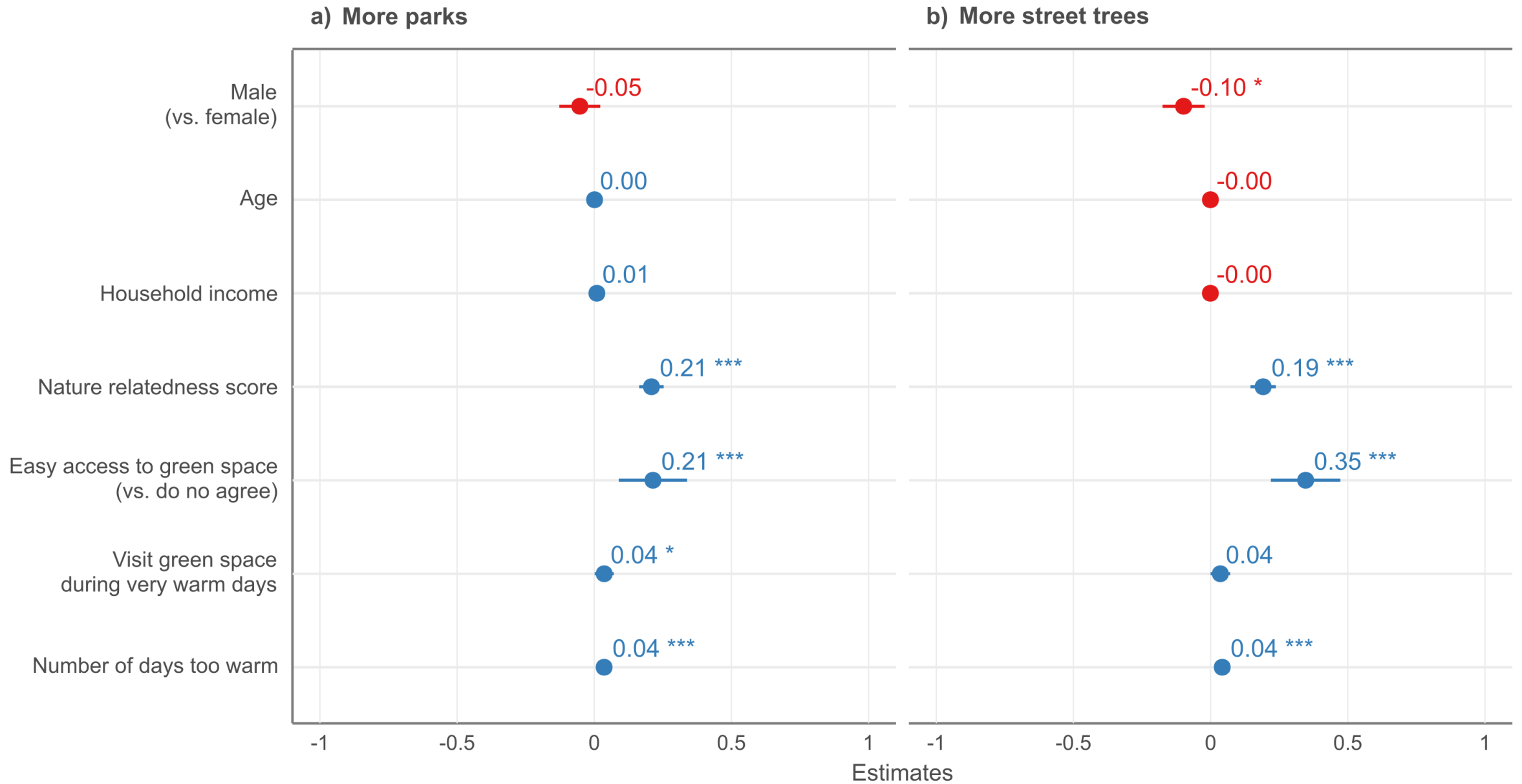


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6









# KEY TAKEAWAYS







Over **60%**  
live within a 15-min walk  
to the nearest green space.

**65%**  
expect positive health outcomes  
from visiting green spaces.





Over **60%**

live within a 15-min walk  
to the nearest green space.

**65%**

expect positive health outcomes  
from visiting green spaces.

Yet, awareness concerning their cooling benefits  
during heat events remains a challenge...







Over **60%**

live within a 15-min walk  
to the nearest green space.

**65%**

expect positive health outcomes  
from visiting green spaces.

Only c. **30%**

visited parks  
on very warm days.





Over **70%**

level of support for creating and  
maintaining more parks.

Over **80%**

level of support for planting  
more street trees.





# Thank you

Rita Sousa-Silva | Chad Zanocco

University of Freiburg  
Leiden University | Stanford University

✉ [a.r.de.sousa.e.silva@cml.leidenuniv.nl](mailto:a.r.de.sousa.e.silva@cml.leidenuniv.nl)

✕ RitaSSilva

# **2nd** **World** **Forum on** **Urban** **Forests**

**2023**



**World Forum on  
Urban Forests**





# 2nd World Forum on Urban Forests

Washington DC, 2023

## Tree New Mexico

### It takes a City



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Presented by  
Maria Padilla  
Kelly White  
Amy Bell



Tree New Mexico

Albuquerque  
NeighborWoods





TNM Founded in 1990 By  
Suzanne Probart

**Sue, along with a group of  
Academy High School students  
planted over 1,250,000 sapling  
trees throughout New Mexico!**





# In 2016, TNM launched the ABQ NeighborWoods Program!

With a goal was to plant 7 and 15 gallon trees in residential areas to create an Urban Forest.

- \* State Forestry
- \* Albuquerque City Planning
- \* City Councilor Ike Benton
- \* Local Tree Growers
- \* the NM Association of Landscape Architects
- \* ABQ Bernco Water Authority
- \* The office of Neighborhood Coordination





# What is ABQ NeighborWoods?

ABQ NeighborWoods is a collaboration between the following:  
City of Albuquerque i.e. Parks and Recreation  
City Councilors  
US Forest Service  
New Mexico State Forestry  
Tree New Mexico  
Local tree growers  
Neighborhood leaders  
Water Authority  
local landscape architects to enhance our urban forest!







What is the ABQ NeighborWoods Grant?

The ABQ Neighborwoods Grant Provides funding, training and consulting professionals for neighborhood members in order to plant 100 street trees and perform tree giveaways of 100 younger trees in their neighborhood. The grant is awarded to the neighborhood by the City Councilor or Parks and Rec.







# Neighborhood Involvement:



Need

Need a group of around 5  
lead volunteers to help us  
drive the project



Need

Need as many volunteers as  
possible to plant the trees



Need

Need help finding homes for  
the 40-100 street trees



Need

Need help with final  
giveaway if applicable of  
2nd 100 trees







# Specific Program Information:

- Want to create an impact with clusters of trees?
- We can plant anywhere within 20 feet back from the street (front and side yards are ok in some cases!)
- There are usually 8+ varieties of street trees that will be available. The trees are all on the climate ready list.
- Property owners must sign for the trees and Treebates will be available.





# Next Steps: Canvassing



Once Neighborhood Team has been trained on how to spot a tree, Tree Plotter and canvassing, the Tree New Mexico staff will join them in canvassing the neighborhood until all 100 trees have been adopted.

During this time, the Neighborhood team will go door to door, presenting the trees, and getting agreements signed by homeowners. At this time, the homeowners get information on the trees, and treebates, and the rest of process to come.

The leaders can meet the homeowners and find out what the strength and needs are in the neighborhood. This is the Neighborhood part of the program.



Once all 100 trees are adopted a landscape architect will then go tree to tree and approve the placement and preferred trees of the homeowners. The flag locations will then be painted with white paint at the spot the where tree is approved. This is for the utility companies so they can check their lines. Also, for our excavator.







# Then: Maps and Holes



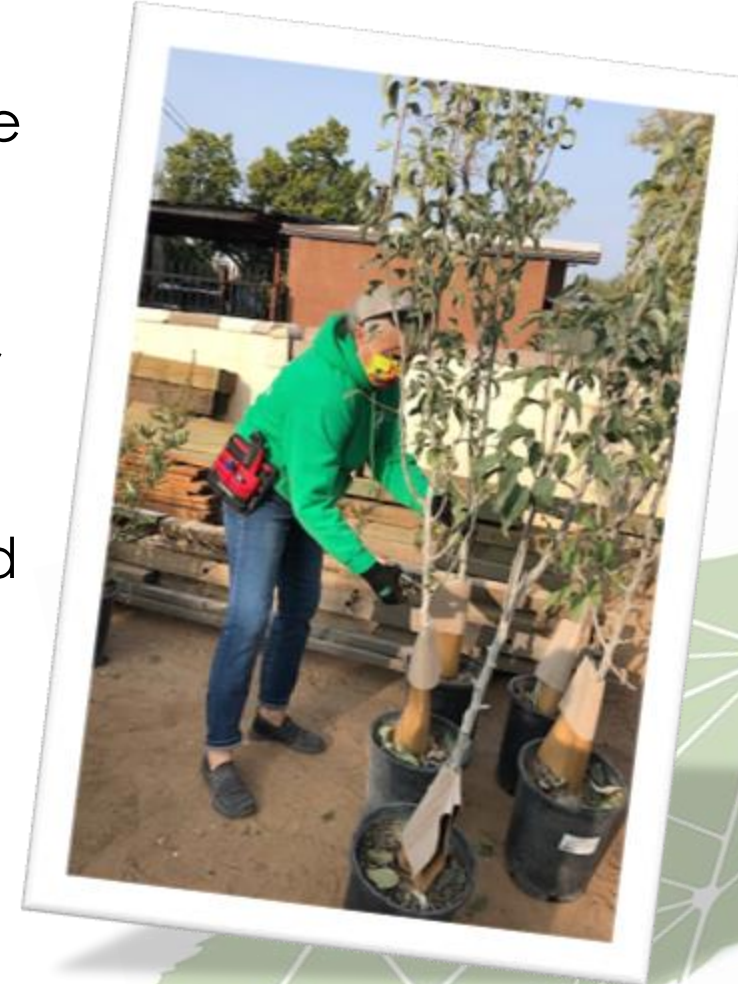
- Using Tree Plotter the coordinator of the planting will create an address list + map listing the site and species of each tree to be planted.
- This list and maps will go to the contractor who will dig the holes for the trees. The Contractor will have 811 check/mark all the lines to ensure we don't hit gas, electric, phone, cable lines etc. while digging.
- If any changes due to utility lines, Tree New Mexico will work with the homeowner on options.
- Once the tree has been approved, the lines have been marked, the address and maps have been done, then the holes will be dug the week of the planting.
- Homeowners will be asked to fill the hole with water the night before and have a hose available for the tree planters.
- If there is an active watering system, it's the responsibility of the home-owner to mark where those lines run.
- This could mean the difference between a hand dig or an excavator dig.





# Delivery Day VOLUNTEERS ☺

- Trees will be delivered the day before to the staging site in the neighborhood.
- The trees will be unloaded, checked, pruned by Tree Stewards, and watered.
- The staging area must be secure and safe to house the trees over night.
- Trees will be marked with colored tape to match our planting maps by species (**see green tape on the bucket** in the photo as an example).







# Planting Day VOLUNTEERS

On the morning of the planting, the trees are loaded onto trucks and then dropped off near the holes where they will be planted. We use maps, address lists, and tape colors for verifying correct delivery.





# Planting Day Volunteer Team Sign-

**Ins** volunteers sign up online and are tentatively assigned a team.

- On planting day, the volunteers sign in, get a T-shirt and His/her are assigned their official planting team and team leader.







# Planting Day Team Leaders

- We have a core group of trained team leaders who volunteer their time year-round to lead our volunteers in planting our trees.
- We hold the team leader meeting to go over any safety or other issues etc.
- Team leaders meet their teams and collect their tools and maps, and then it's off to plant.





# Planting Day Quality Check

Planting coordinator drives through the neighborhood post planting to check for the following:

- ✓ Tree is planted.
- ✓ Tree is watered.
- ✓ Tree is staked if needed.
- ✓ Verifies that the planting site is cleaned up and looks as good as possible.
- ✓ Tools are checked back in and undamaged.
- ✓ All tools are cleaned, and the big ones returned. to storage.







# Day After: Treebates

- We partner with the Water Authority to assist the homeowners who have adopted trees in acquiring a Treebate which is a credit on their water bill just for letting us plant the tree or trees.
- The TNM Team lead by coordinator assemble the Treebate mailing. Each envelope contains:
  - Hard copy of the Agreement
  - Information on the specific tree
  - Watering instructions
  - Staking diagram
  - Links to the website
  - Treebate documentation





# Preparing for Giveaway

Planting coordinator and neighborhood volunteers canvass the entire neighborhood with door cards/flyers outlining the trees available, locations, dates, COVID instructions – these can be drive or walk-up events

- Delivery of trees to a secure location
  - Pruning by Tree Stewards
  - Watering
  - Info sheets attached
  - Tree info and Planting instructions created







# Tree Giveaway!

Lines form

Check the Flyers to  
verify they are from  
the neighborhood

Volunteers help  
give the trees away





# Follow up and Benefits

- Ensure all trees and sites are correct in Tree Plotter.
- Ensure all tree recipients are entered into Mailchimp.
- Make copies of the agreement for our files.
- Deliver Agreements to the City.
- Drive the trees again if it's a Parks and Rec planting.
- Arborist audits every year for three (3) years, and leaves suggestion door cards as needed.
- Tree Stewards help with third year assessments/measurements
- Generate the 3<sup>rd</sup> year reports.
- Tree Stewards continue to take calls from concerned tree owners and assess trees.
- Free pruning classes and other educational trainings are offered.
- Neighborhoods seem to care more about their areas and homes.
- We get long-term volunteers who enjoy the program.



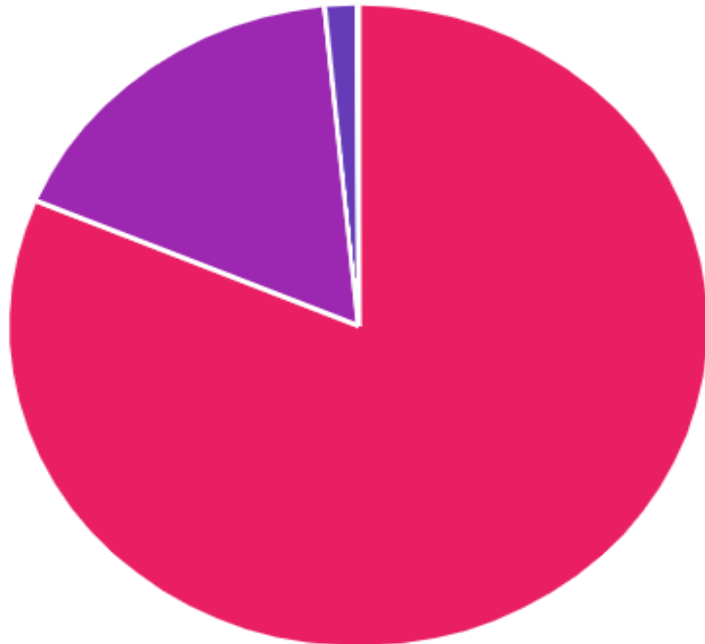




# THREE YEAR AVERAGE

Status

Alive	81.4%
Dead	17.1%
Removed	1.5%
Proposed Site -...	0.1%



Species with Most Mortality - Top 10

Crapemyrtle	19.3%
Shantung Maple	15.3%
Desert Willow	14.4%
Eastern Redbud	9.9%
Kentucky Coffee...	8.4%
Pear	7.4%
Plum 'Krauter's...	6.4%
Raywood ash	6.4%
Chinese Pistach...	6.4%
Vitex Chasetree	5.9%





## **2nd World Forum on Urban Forests**

Washington DC, 2023

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# It takes a City!

It indeed takes a city—our city leaders, dedicated staff, landscape architects, local nurseries, planting leaders, neighborhood representatives, wonderful volunteers, as well as our partners at Albuquerque Bernco Water Authority and Parks and Rec—all united with the shared hope that the youngest members of our city will continue to enjoy the benefits of trees for many years to come!





# Thank you

Maria Padilla / [maria@treenm.org](mailto:maria@treenm.org)

Amy Bell /

[amy@groundworkstudio.com](mailto:amy@groundworkstudio.com)

Kelly White / [kelly@treenm.org](mailto:kelly@treenm.org)



Food and Agriculture  
Organization of the  
United Nations





# **2nd** **World** **Forum on** **Urban** **Forests**

**2023**



**World Forum on  
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# 2nd World Forum on Urban Forests

Washington DC, 2023

## iTree4UA Project Experience

### Community Engagement in Urban Forest Inventories Using i-Tree Eco Under War Conditions in Ukraine



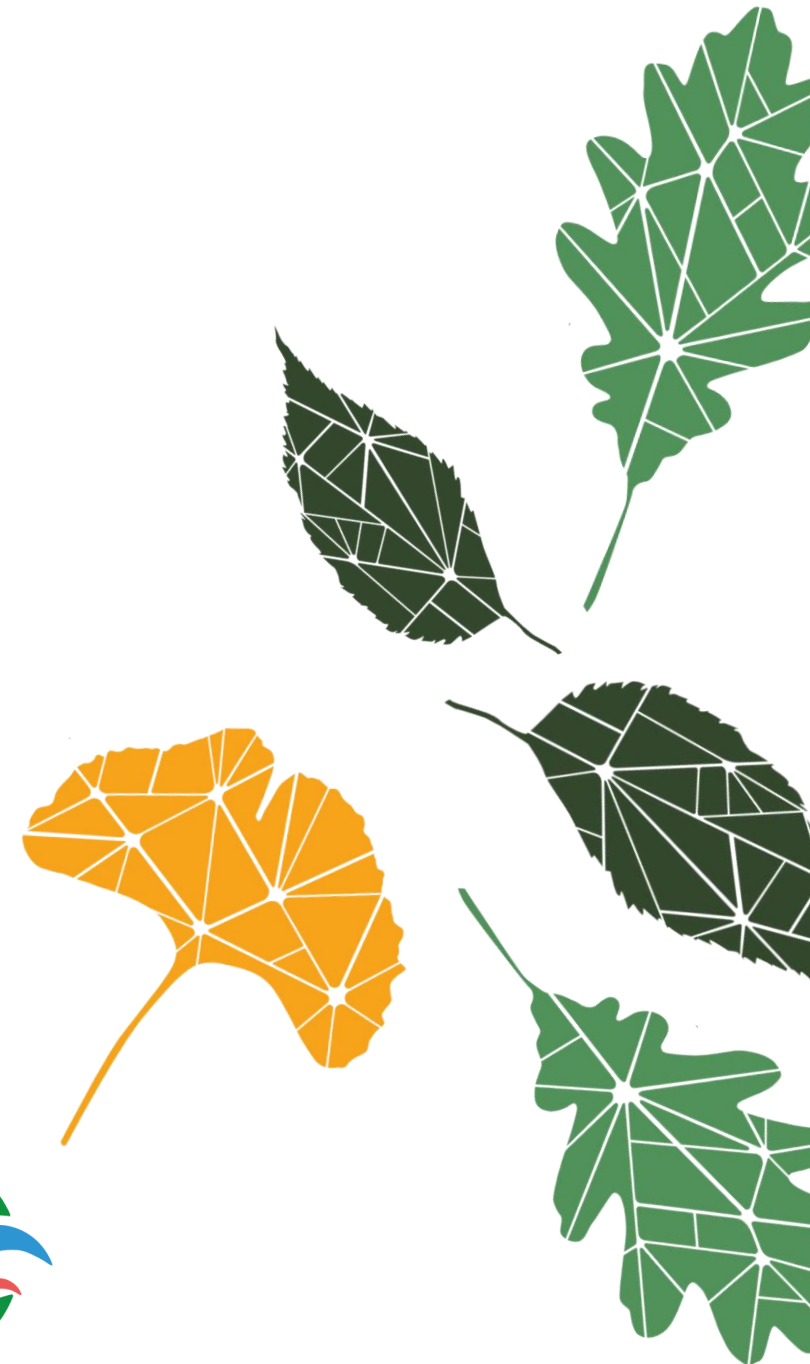
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Presented by

Oleksandra Khalaim

Ph.D., Head

NGO "Ukrainian Ecological Club "Green  
Wave"





# Outline

1. About us and our project
2. Work conditions and project progress before and after 24 February 2022
3. Why the project is important for local communities in times of the war





*Ukrainian Ecological Club*

**Green Wave**

*ecoclubua.com*

- We are a team of ecology experts and active members of the environmental movement in Ukraine since 2008.
- Our mission: We educate people, aiming to preserve and minimize the negative impact on the environment while taking care of the present and the future of humankind.
- Our strategic directions: Education for Sustainable Development (incl. eco-games), Combating Climate Change (incl. civil activism & research on urban greenery), Joint Public Initiatives, and Ecological Component of Corporate Social Responsibility (green office expertise for Ukrainian business).







## Transparent and participatory green space inventory system in Ukraine: **iTree4UA**

- Goal: to enable a full functionality build-out of **i-Tree Eco** as an interactive, participatory, and transparent inventory system for green zones both in rural and in urban areas in Ukraine for the benefits of local communities and environment under climate change threats
- Duration: since September 2021
- Funding: USDA Forest Service International Programs, USAID
- Partners: Davey Tree Expert Company, The Davey Institute



**USAID**  
FROM THE AMERICAN PEOPLE



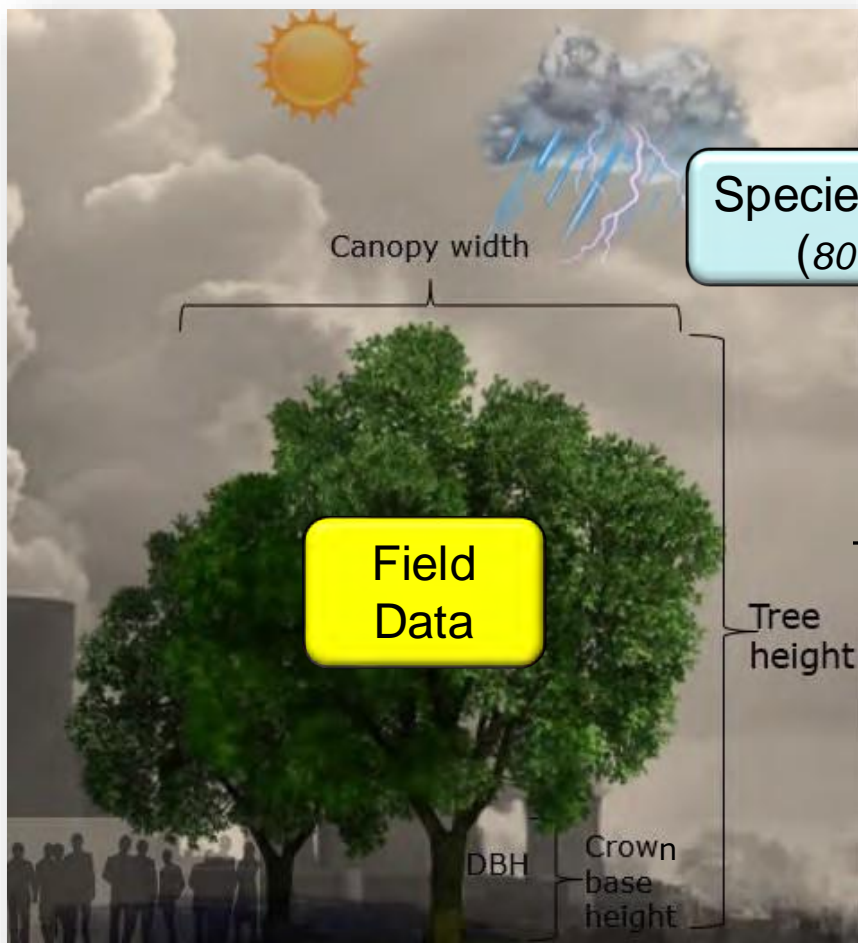
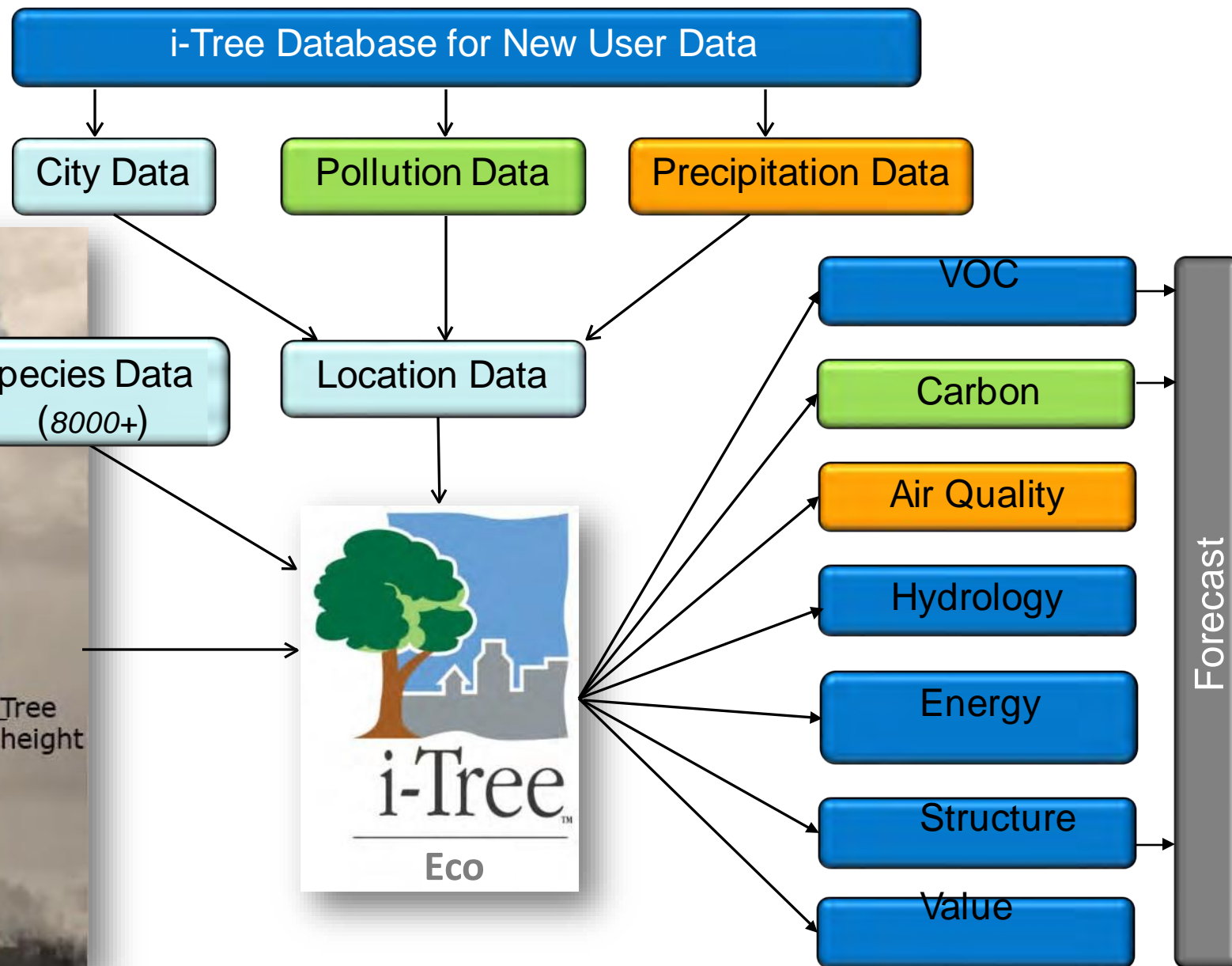
**DAVEY**   
*Proven Solutions for a Growing World*



Ukrainian Ecological Club  
**Green Wave**  
ecoclubua.com



# i-Tree Eco model for international users







# i-Tree Eco

## Whole country integrations:

- Australia and New Zealand
- Japan
- Canada
- Colombia
- European Union
- Mexico
- South Korea
- United Kingdom



## Single city submissions:

Over 90 cities including

- New Delhi, India
- Montevideo, Uruguay
- Sao Paulo, Brazil
- Adama, Ethiopia





## Project timeline and activities

- 1. September – December 2021:** to collect and to incorporate all minimum required data for the i-Tree Eco full country buildout for all 1438 hromadas (tertiary administrative division units) of Ukraine
- 2. January-February 2022:** national call for i-Tree Eco piloting in 4 selected communities from 4 regions of Ukraine
- 3. Spring-summer 2022:** to collect additional data for pilot communities, to train local volunteers, and to organize tree inventories
- 4. Spring 2023:** to launch the All-Ukrainian Academy i-Tree4UA







## February 24, 2022: the russian invasion of Ukraine



- National call for i-Tree Eco piloting – reallocated to *Western regions only*;
- Trainings on i-Tree use were held *online* with field trips of our technical coordinator to the pilot communities for inventory try-out;
- Internal work organization has been modified to more *flexible / remote formats* (adjusting work schedules, using external co-workings and cloud technologies) due to:
  - Military actions in Kyiv and region, air radar sirens, and shelling;
  - Some team members reallocated with their families to safer places within Ukraine.





## Results of i-Tree Eco piloting

### The national call:

- ❑ **28 applications**, including communities from Eastern and Southern Ukraine situated very close to active military operations;
- ❑ **5 applications received on February 24 and later.**

1	Позначка часу	1. Назва ОТГ:
14	12.02.2022 00:10:12	Коблівська сільська тер М
15	15.02.2022 11:15:26	Марківська селищна ра Л
16	15.02.2022 17:16:47	Бережанська міська ОТ Т
17	17.02.2022 10:43:22	Хустська міська територ 3
18	18.02.2022 13:08:0	Маріуполь Д
19	19.02.2022 20:47:00	Болехівська територіаль І
20	21.02.2022 14:28:27	Новороздільська міська Л
21	22.02.2022 14:29:36	Великописарівська сели С
22	23.02.2022 00:06:40	Роганська селищна об'є Х
23	23.02.2022 11:29:50	Первомайська міська те М
24	23.02.2022 16:00:13	Надвірнянська міська т І
25	24.02.2022 14:34:51	Чернівецька територіаль Ч
26	26.02.2022 13:37:35	Беселинівська селищна М
27	28.02.2022 09:10:29	Ірятинська міська тер Г
28	01.03.2022 15:08:09	Хитомирська міська об'є Х
29	26.04.2022 14:03:05	Львівська міська громад
30		

### The piloting:

- ❑ **4 communities** in Western Ukraine
- ❑ **4,3 hectares** and **800 trees** inventoried
- ❑ **350 local volunteers** involved









# All-Ukrainian i-Tree Academy 2023



- ✓ 8 zoom workshops and a homework
- ✓ Field inventories in local communities

## 2 Academy graduations

- ✓ *May-June 2023*: the first wave, 124 applicants, 20 certificates
- ✓ *August-September 2023*: the second wave, 120 applicants, 25 certificates



**Inventory kit for 10 best Academia alumni**







## Why this project is important for local communities in times of the war



- Being a part of like-minded community
- Continuing life-long learning
- Shifting the focus from war related threats to public activism
- Building a better future locally
- Feeling alive
- Living a meaningful life under post-normal reality
- Taking care of yourself through caring the trees





## Some citations

- Olena Kozak, project expert and the Academy lecturer:

*During the Academy seminars and field inventories I had a strong feeling that our students just needed to get it off their chest, speak out whatever they got inside.*

- Yevheniia Myktyianska, Executive Director:

*The last months were very difficult because of the war escalation. In May almost every night, the russian missiles and drones struck Ukrainian cities. It had a negative impact on the mental state and productivity of the project team. Nevertheless, we tried to support each other and spent some time reflecting on our feelings. It helped us to adapt to and accept a new reality. We are proud that despite all challenges we managed to keep the initial project activities. The team keeps working and we do our best to adapt to living and acting in the post-normal reality we all have in Ukraine.*







# Thank you



Oleksandra Khalaim | Head

Ukrainian Ecological Club "Green Wave"

✉ [oleksandra.khalaim@ecoclubua.com](mailto:oleksandra.khalaim@ecoclubua.com)



Food and Agriculture  
Organization of the  
United Nations



Arbor Day  
Foundation



POLITECNICO  
MILANO 1863



International Society of Arboriculture



Smithsonian



FOREST SERVICE  
U.S. DEPARTMENT OF AGRICULTURE



# CEUs

**Session 2.6: People Like Us: The role of urban green space in strengthening social cohesion and reducing conflicts and crime**



**PP-23-3567**



**World Forum on  
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