



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

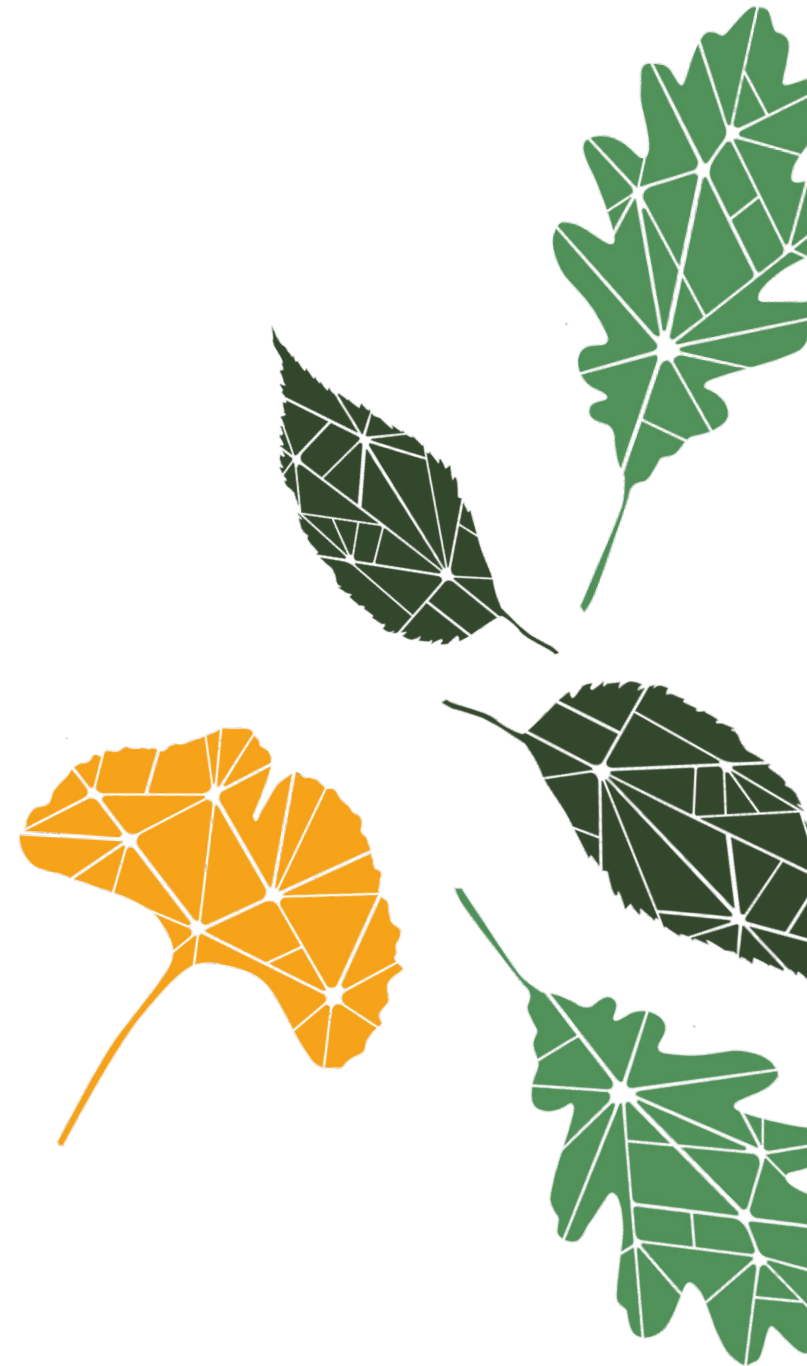


Presented by

Hanne Johnsrud

Project leader Oslotrær

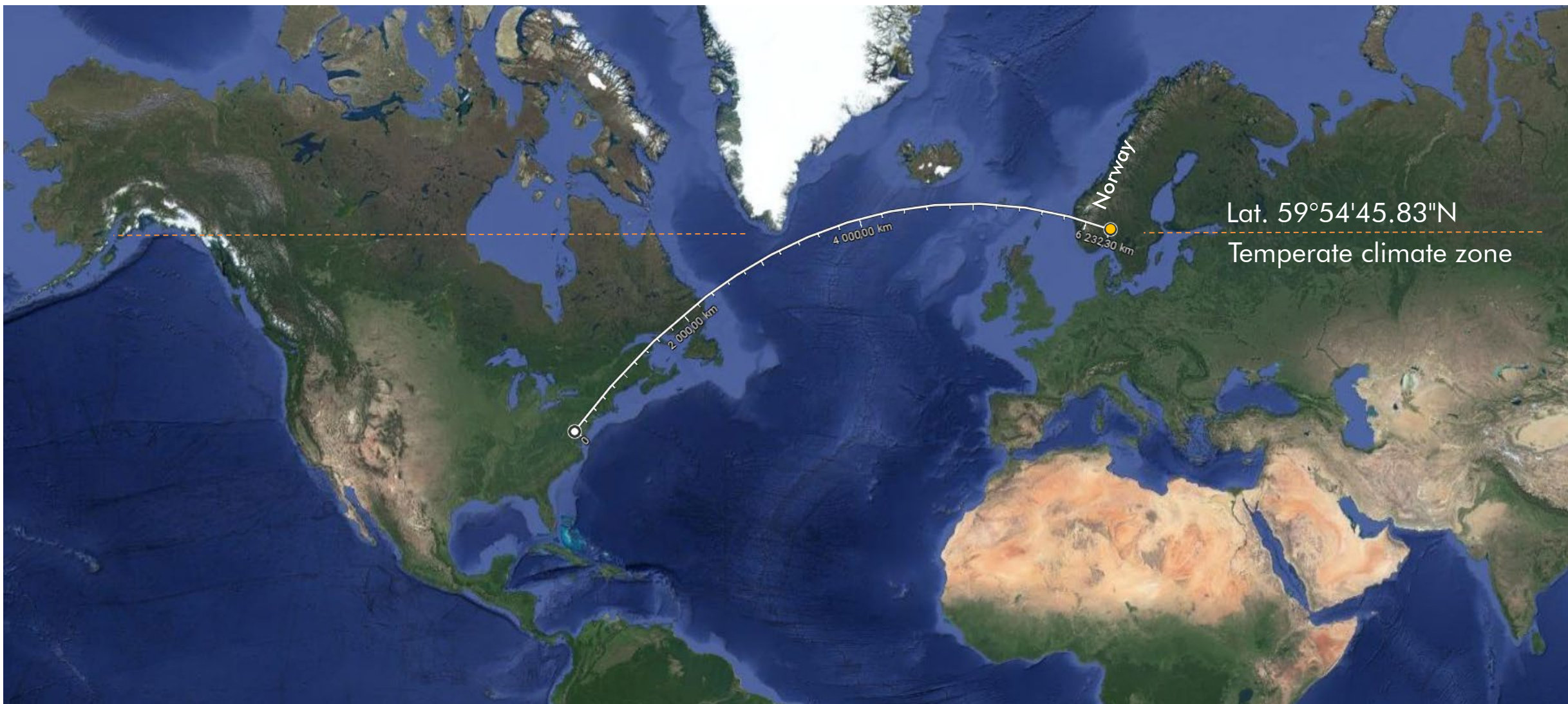
Centre for Urban Ecology, City of Oslo





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



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Recognising trees as critical urban infrastructure

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





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Rapid urban growth





Neighbour-woods are disappearing



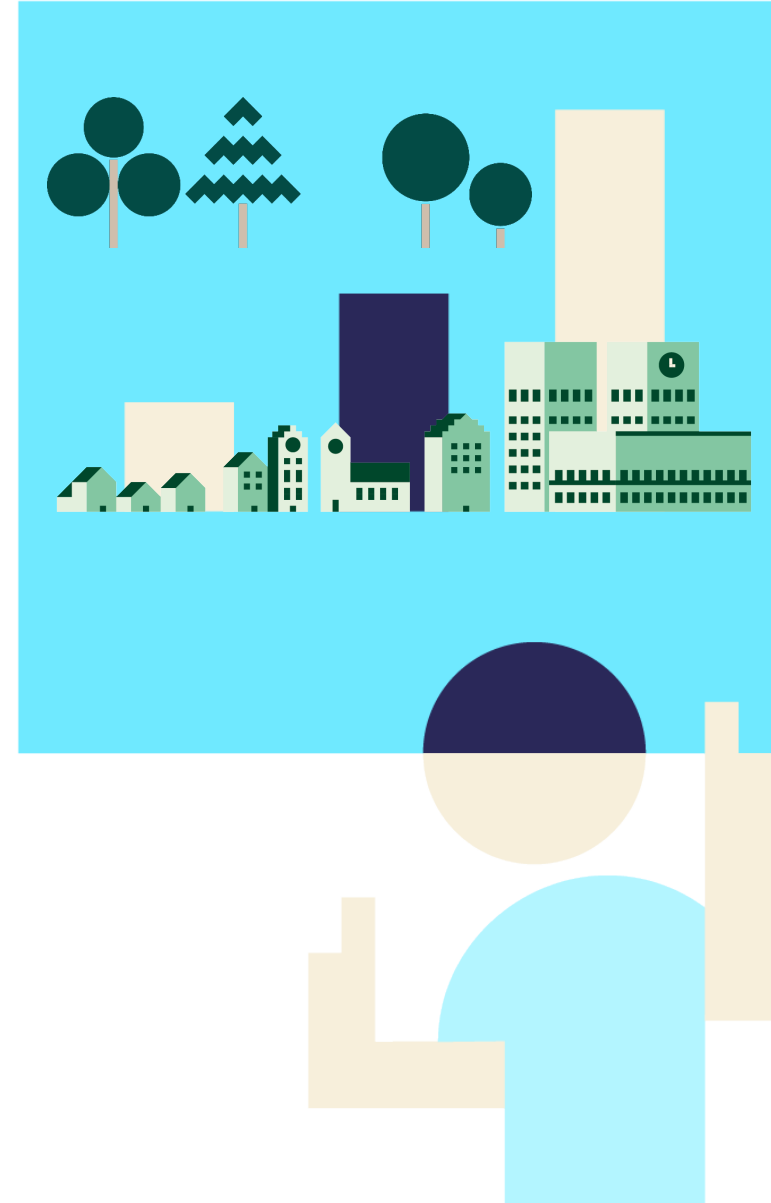
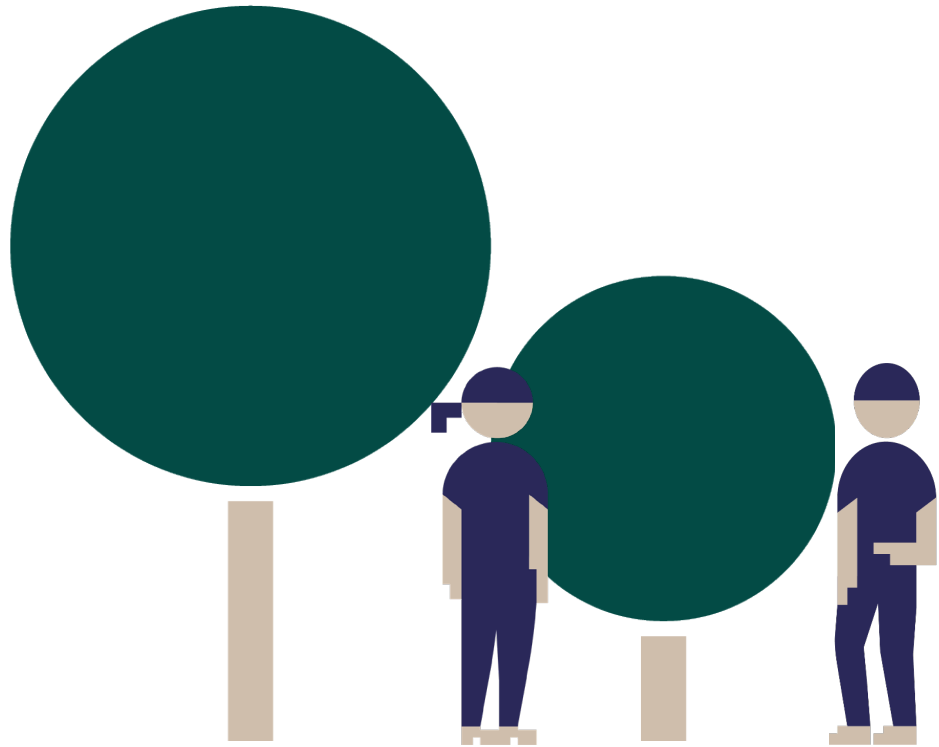


Planting trees in hearts, minds and city-planning





Two perspectives





Mapping the trees of Oslo



QR links to
map

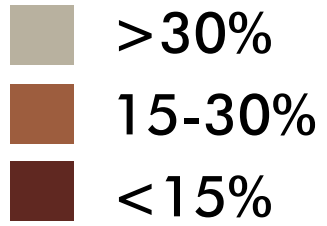




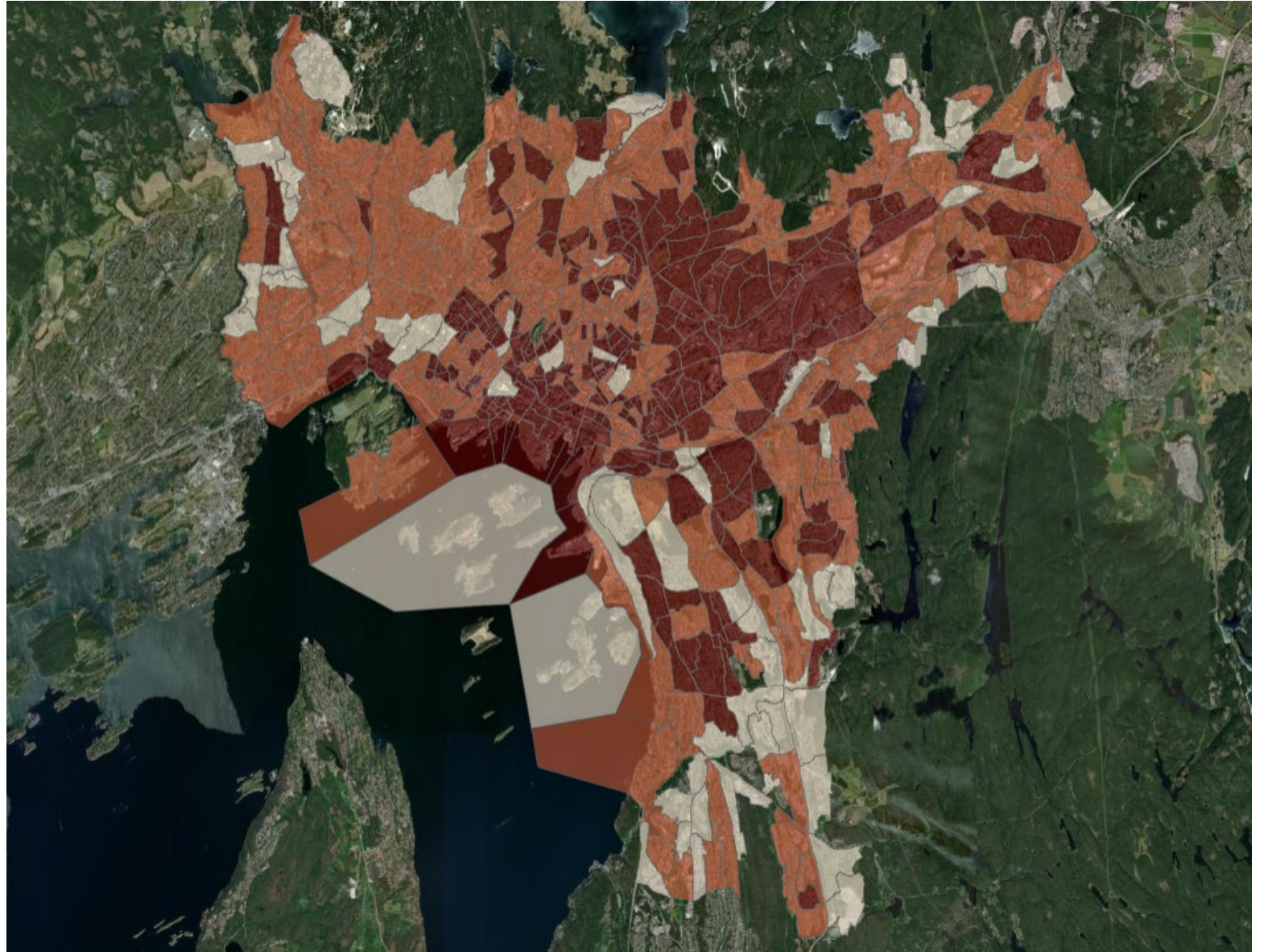
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Canopy cover



QR links to
map





Community building





Planting trees so young people can grow

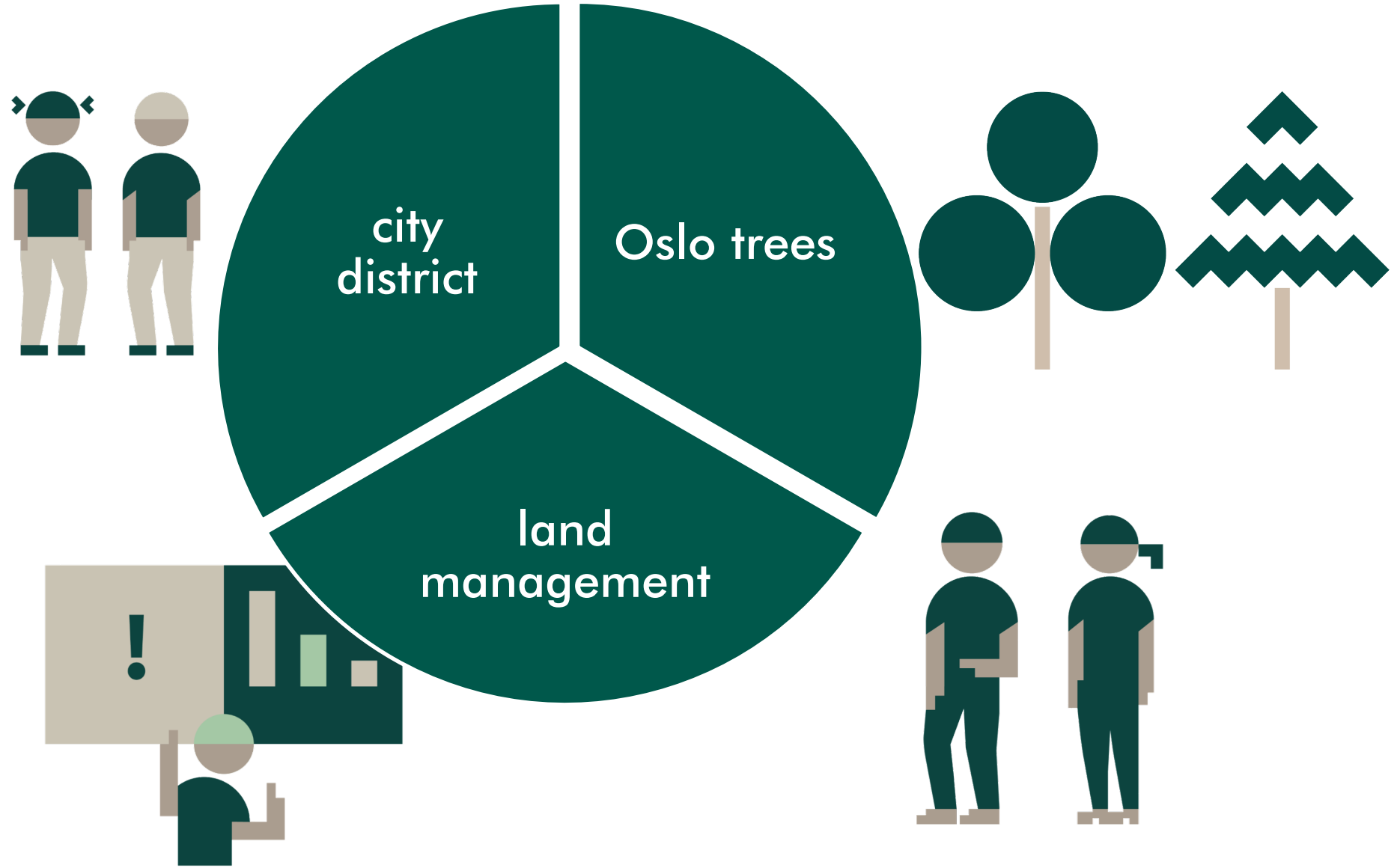


Ulvenhagen



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Mapping context, needs and potential





Commitment over time





A tree is never indifferent to the site





Reimagine the city





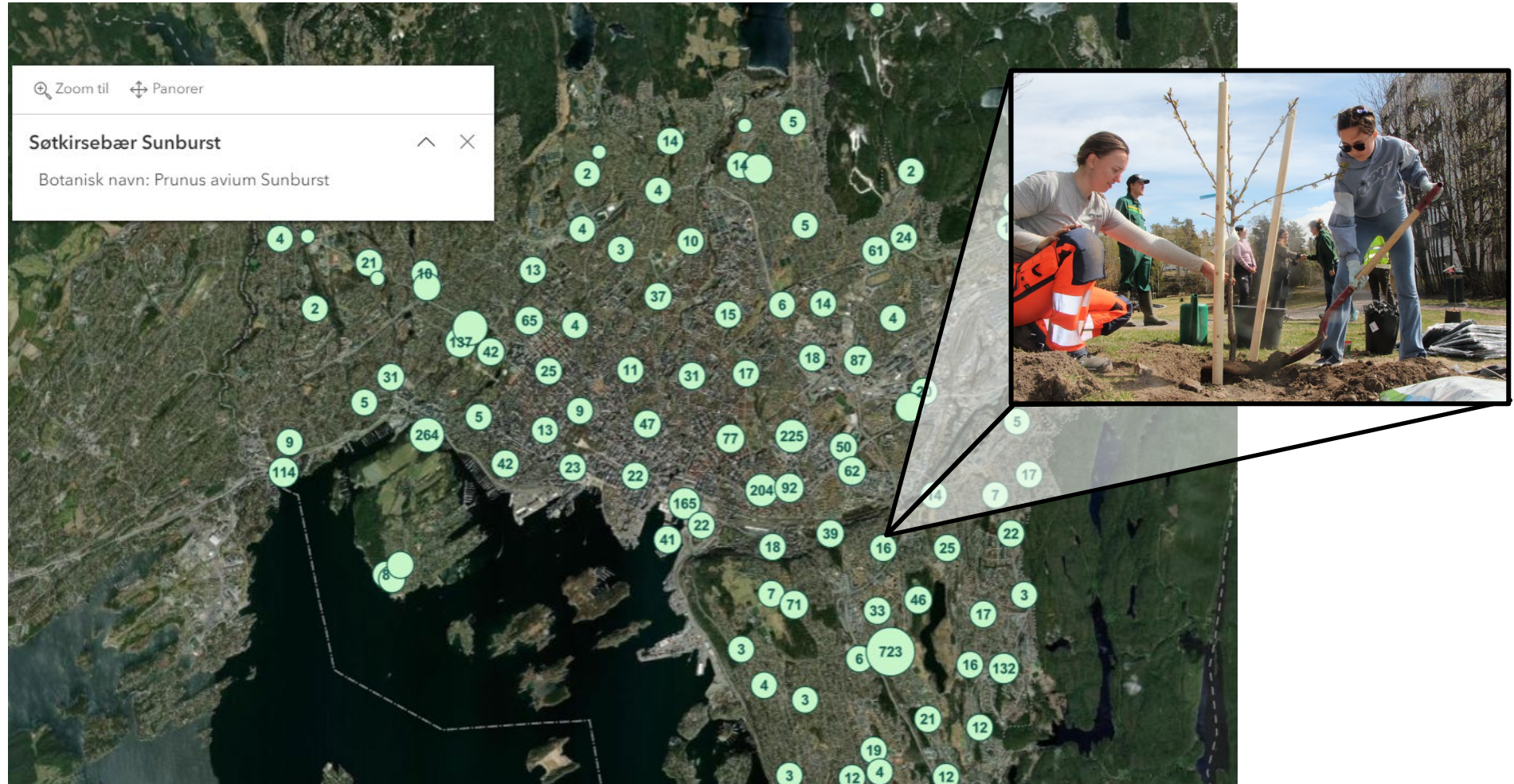


Shape the world around you





Making every tree count





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Thank you

Hanne Johnsrud | City of Oslo

www.OSLOTRAER.no

✉ hanne.johnsrud@pbe.oslo.kommune.no



Food and Agriculture
Organization of the
United Nations



Arbor Day
Foundation



International Society of Arboriculture



Smithsonian



FOREST SERVICE
U.S.
DEPARTMENT OF AGRICULTURE

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



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 Delagrangue
- ... and others!





Urban Forest Management Plans (UFMPs)



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

**POLITIQUE
DE L'ARBRE
DE LA VILLE**

PLAN DIRECTEUR
des milieux naturels et de la forêt urbaine



- **“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
 - ...



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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 ^a, Kieron J. Doick ^b, Malcolm D. Hudson ^a, Kate Schreck ^a

Show more

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

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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 ^{id}, Joe Hurley ^{id} & Judy Bush ^{id}

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 ^a, Andrew A. Millward ^a, Sara Edge ^b, Lara A. Roman ^c, Cheryl Teelucksingh ^d

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

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What do we need to know?

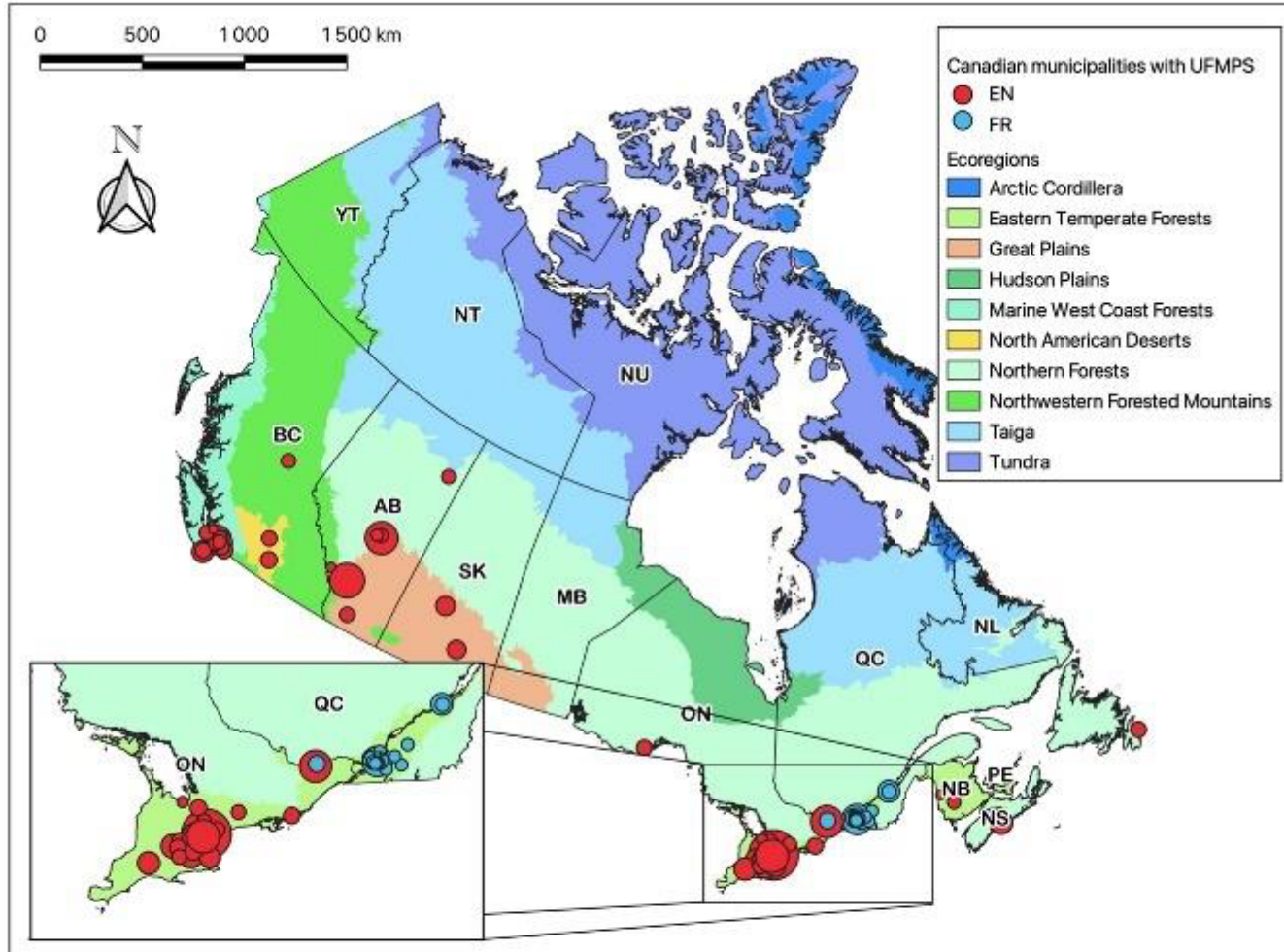
1. What is the current content of UFMPs?:
 - 1.1 What are the changes over time?
 - 1.2 Role of social-ecological characteristics?
2. How do managers view UFMP implementation?
 - 2.1 UFMP objectives
 - 2.2 UFMP outcomes
 - 2.3 UFMP challenges and opportunities





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

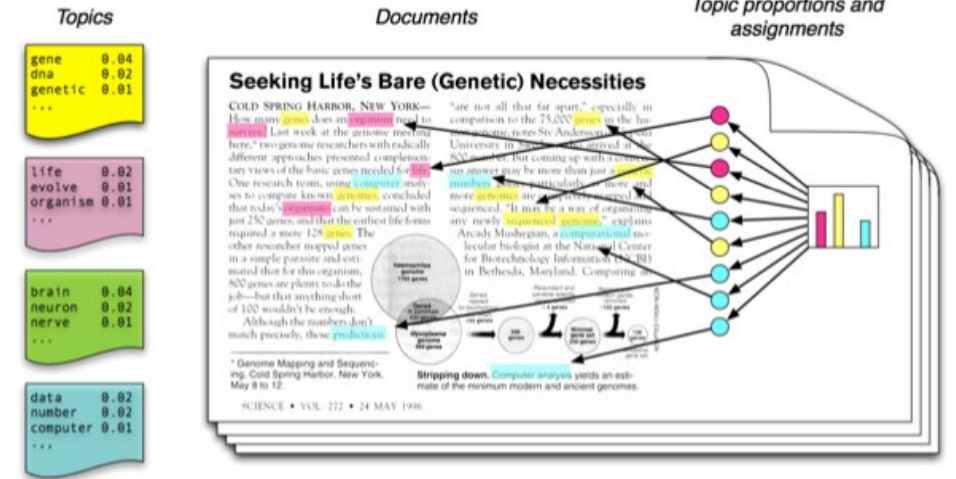
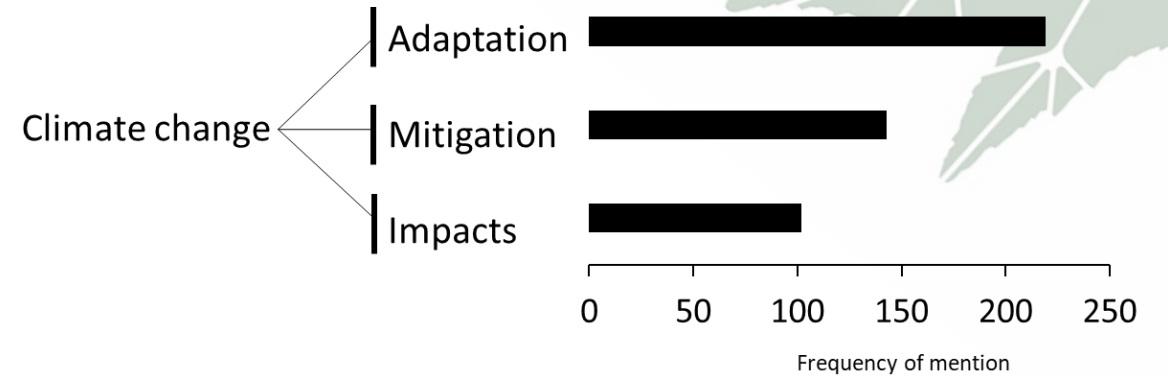


Figure source: Blei, D. M. (2012). Probabilistic topic models. *Communications of the ACM*, 55(4), 77-84.

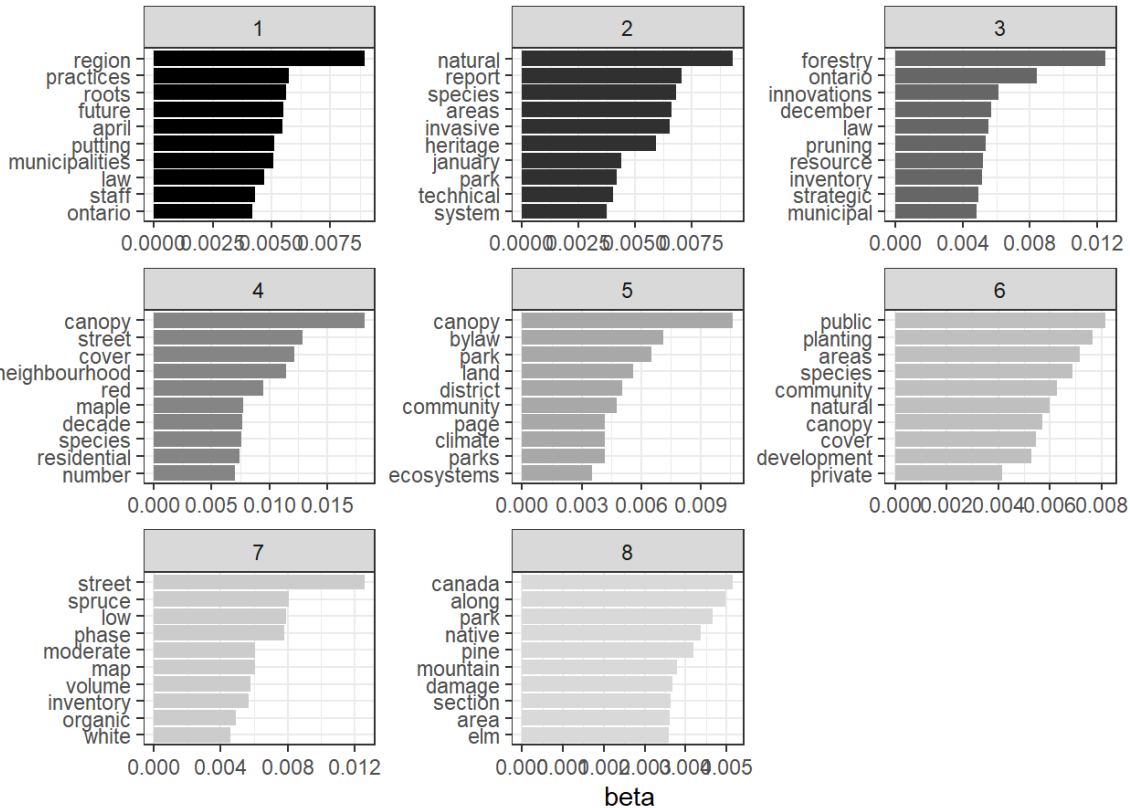




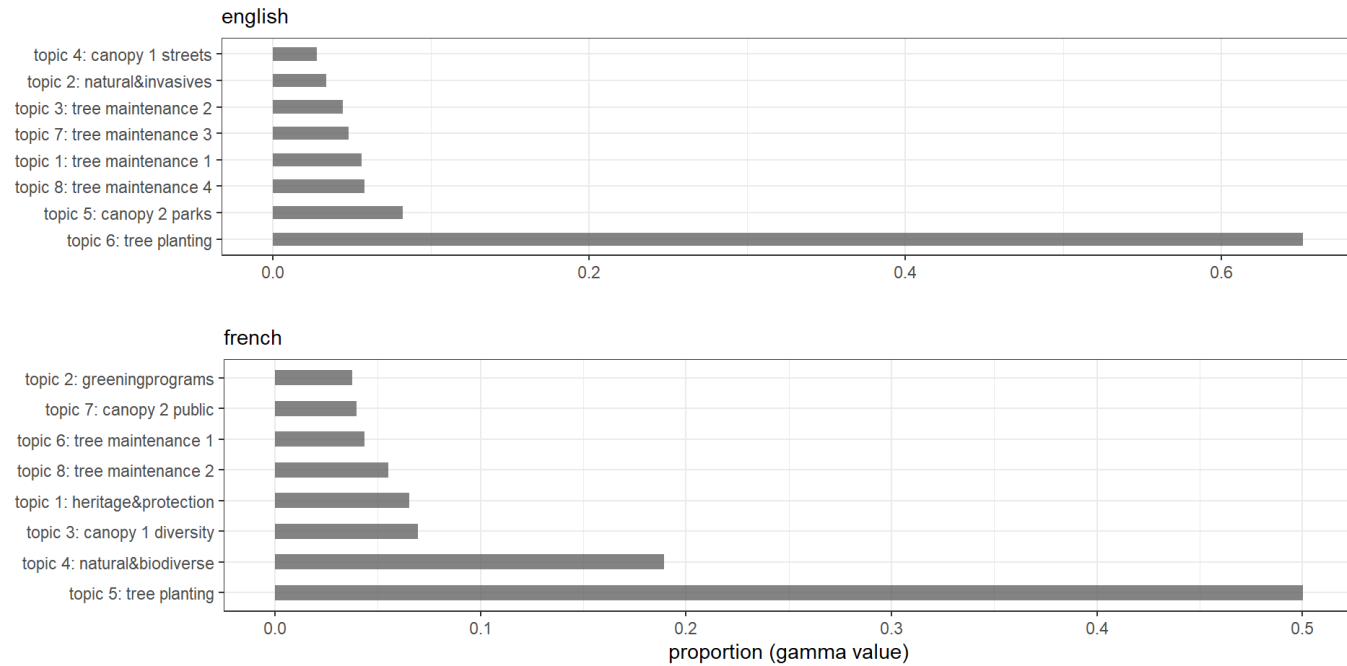
Canadian UFMP content

n = 74

Most **TOPICS** are about tree planting



Average topic proportions across UFMPs

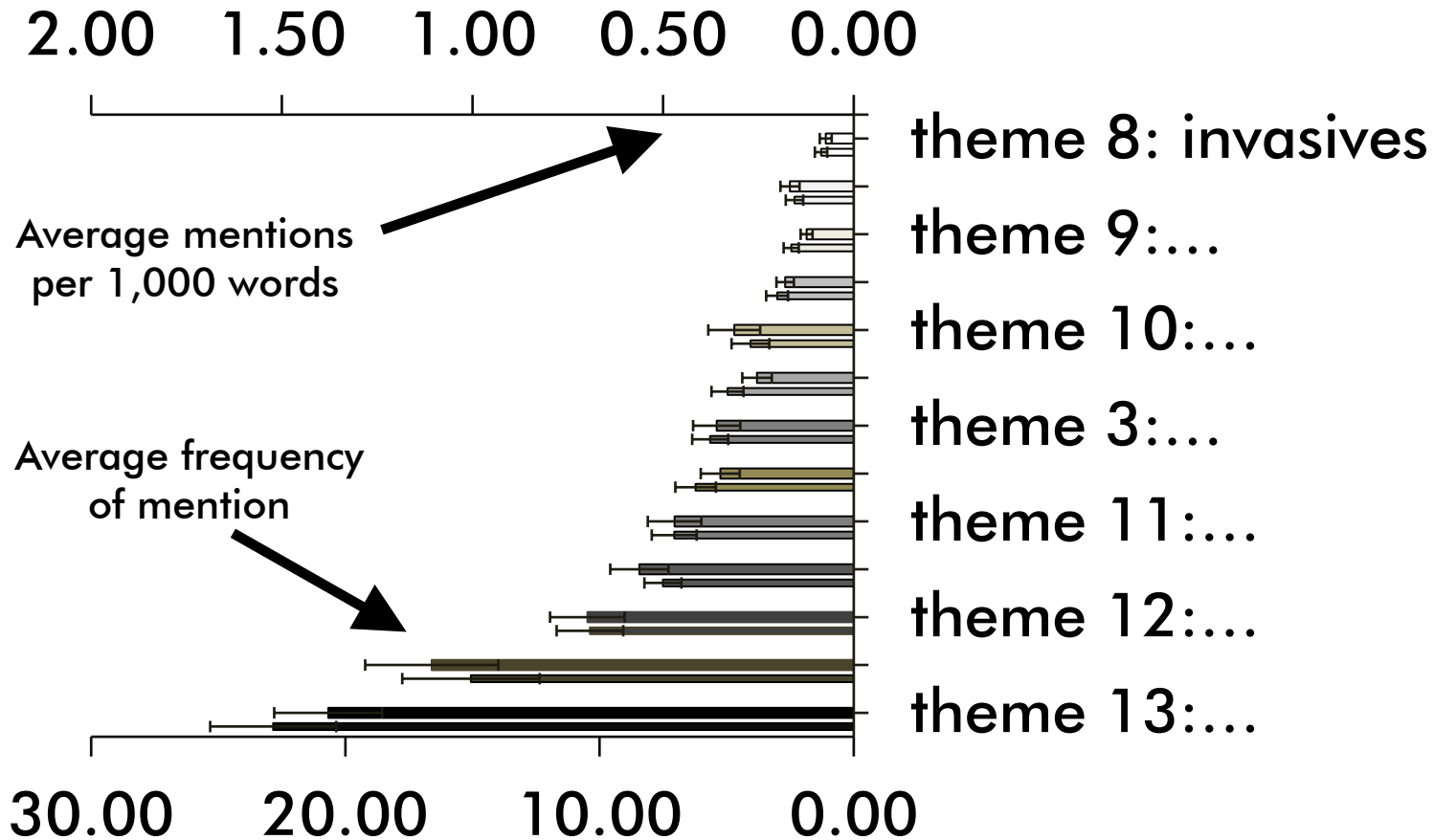




Canadian UFMP content

n = 63

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





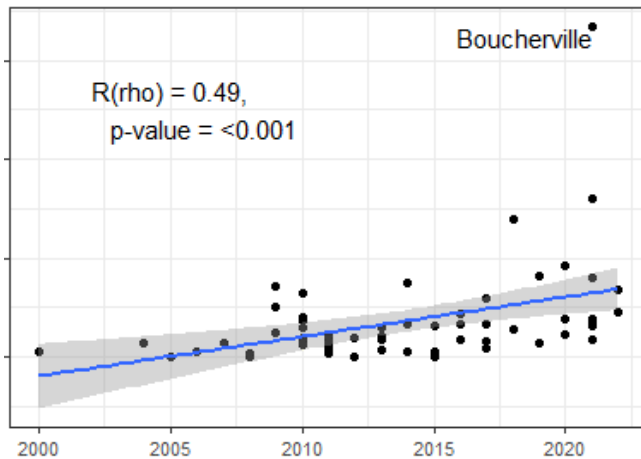
Canadian UFMP content

$n = 63$

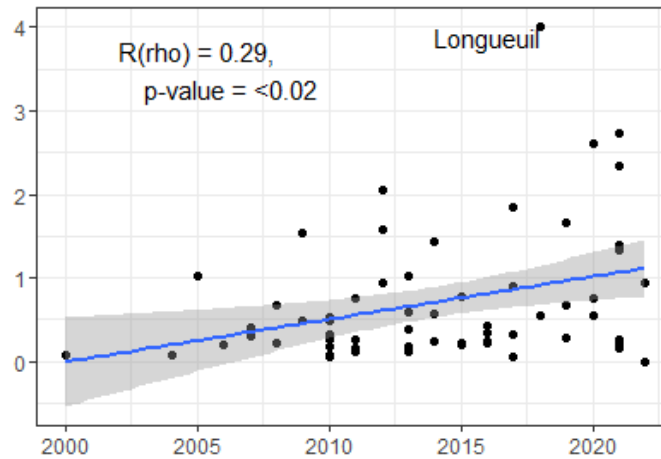
Tree establishment and climate change **THEMES** increase over time

mentions per 1,000 words

b) theme 3: climatechange

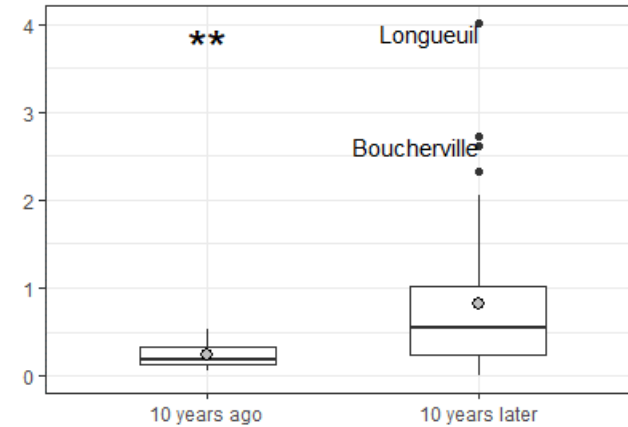


c) theme 12: treeestablish&enhance



Year of publication

e) theme 12: treeestablish&enhance





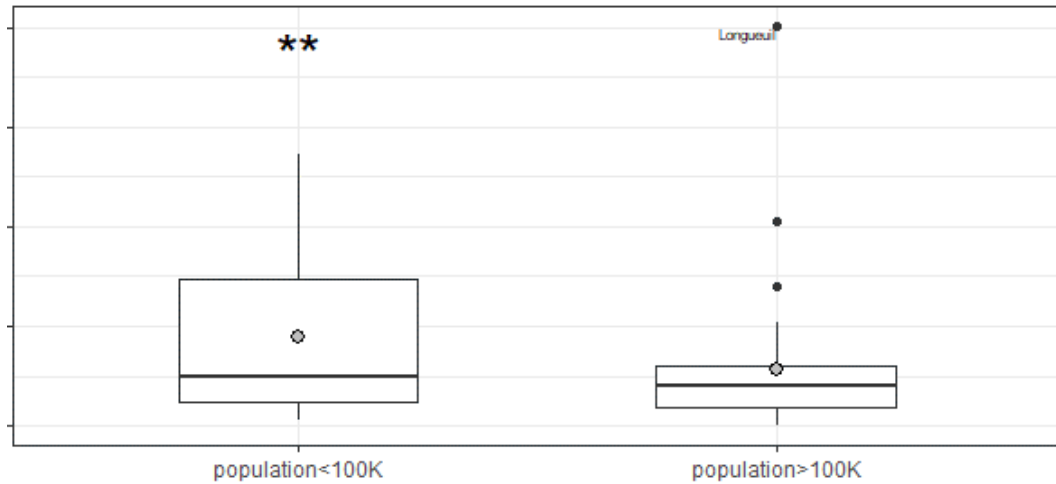
Canadian UFMP content

$n = 63$

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

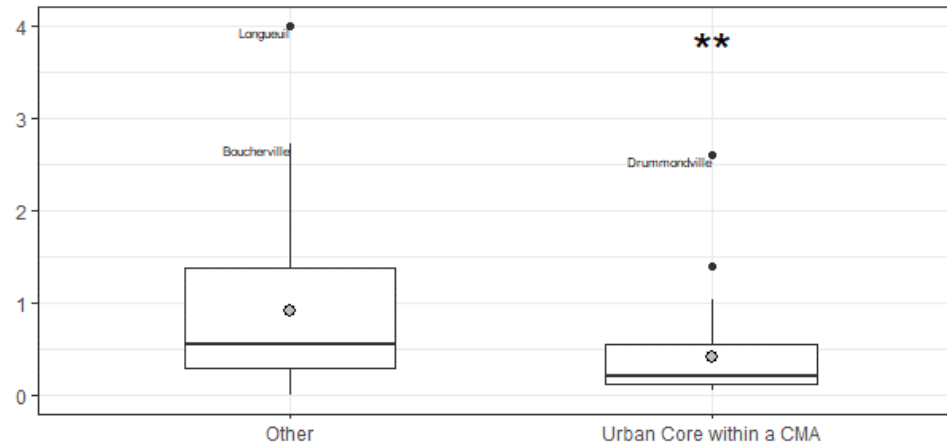
mentions per 1,000 words

d) theme 12: treeestablish&enhance



Population

f) theme 12: treeestablish&enhance



Type of
municipality

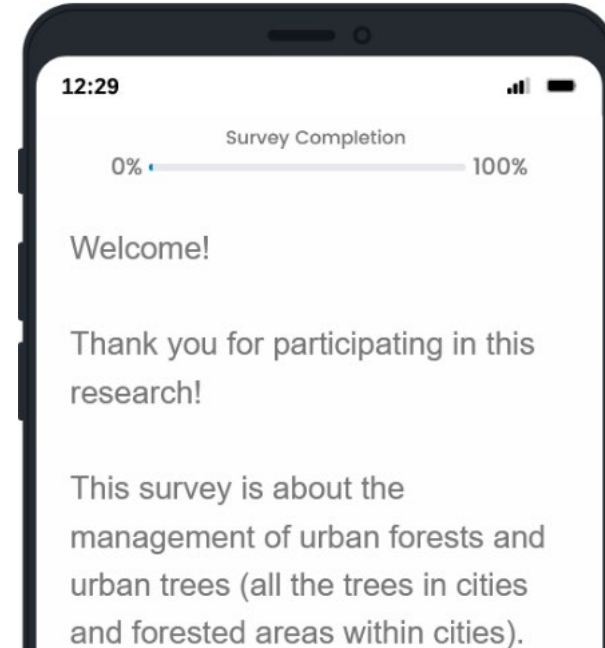


Views on Canadian UFMP implementation

- Online, targeted survey

Key Features:

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

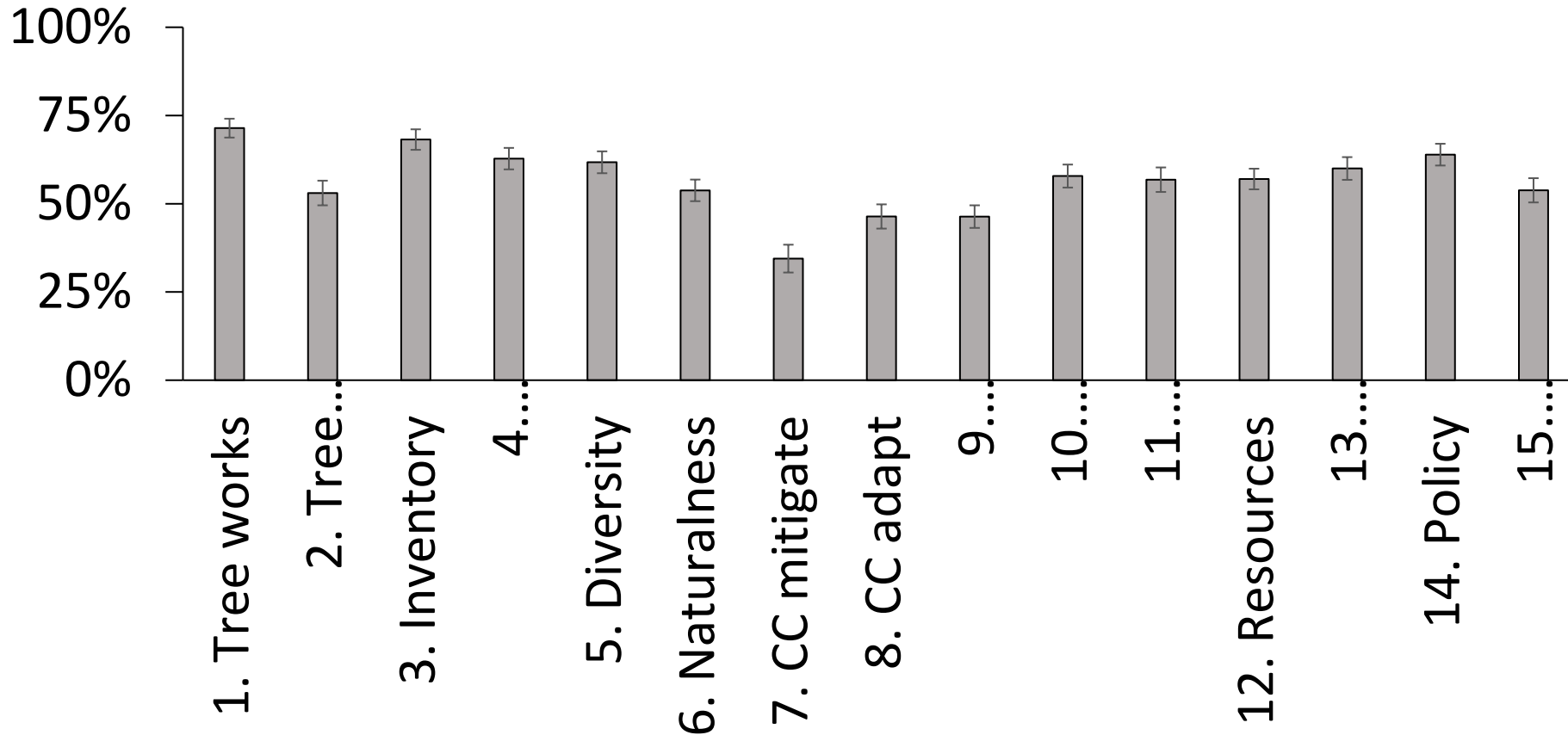




Views on Canadian UFMP implementation

n = 118

Climate change objectives less achieved





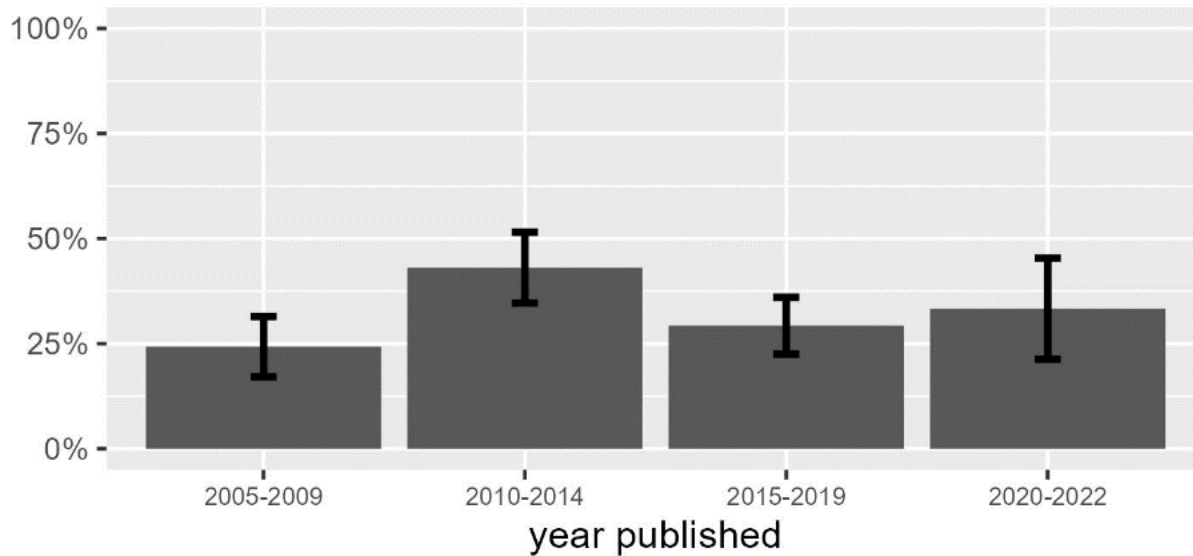
Views on Canadian UFMP implementation

n = 118

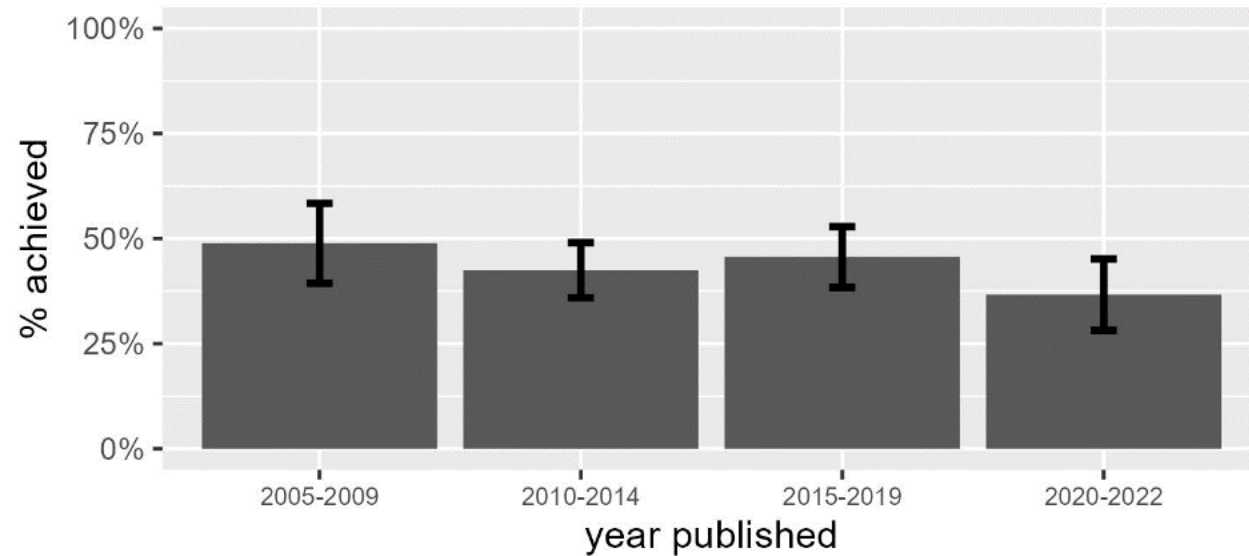
Achievement of climate change objectives does not change over time



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



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

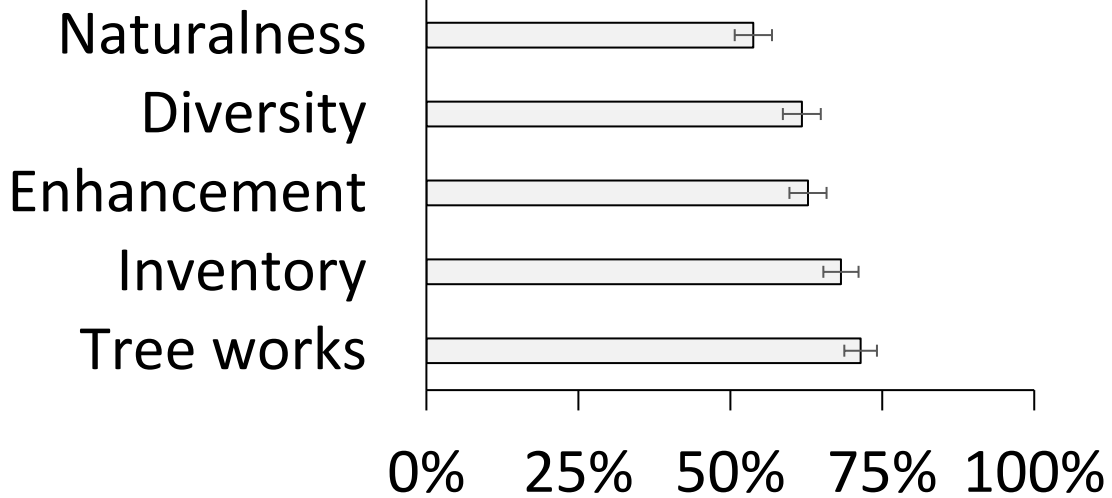


Views on Canadian UFMP implementation

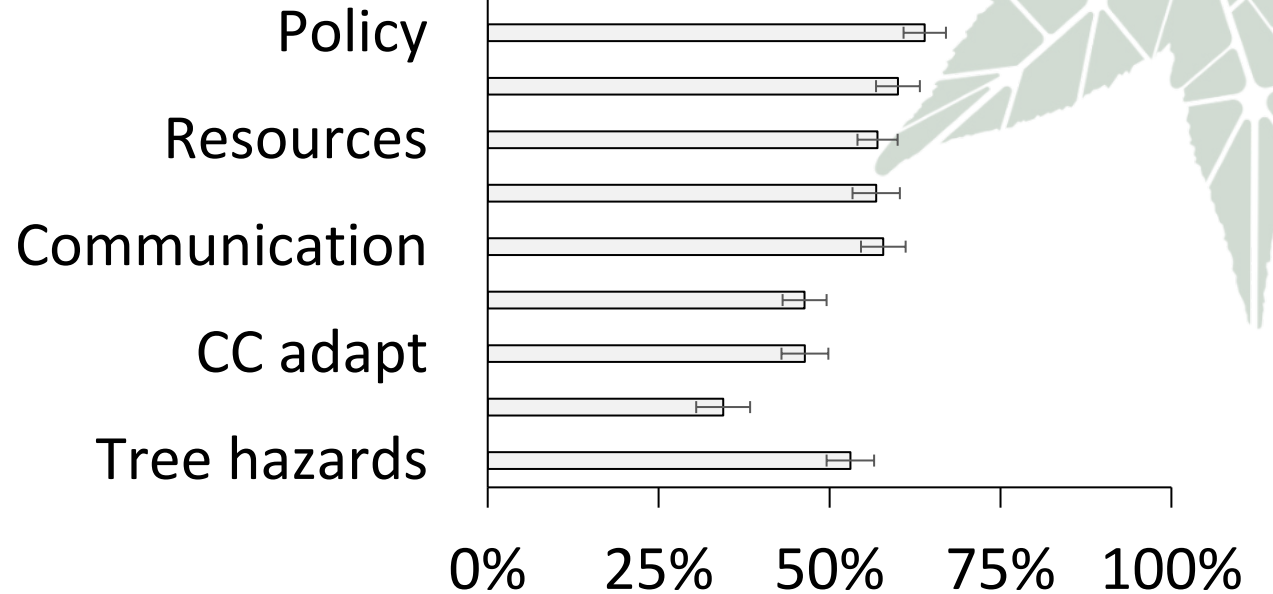
n=118

Different views on objectives

Factor: better & more trees



Factor: strategy, community, resources

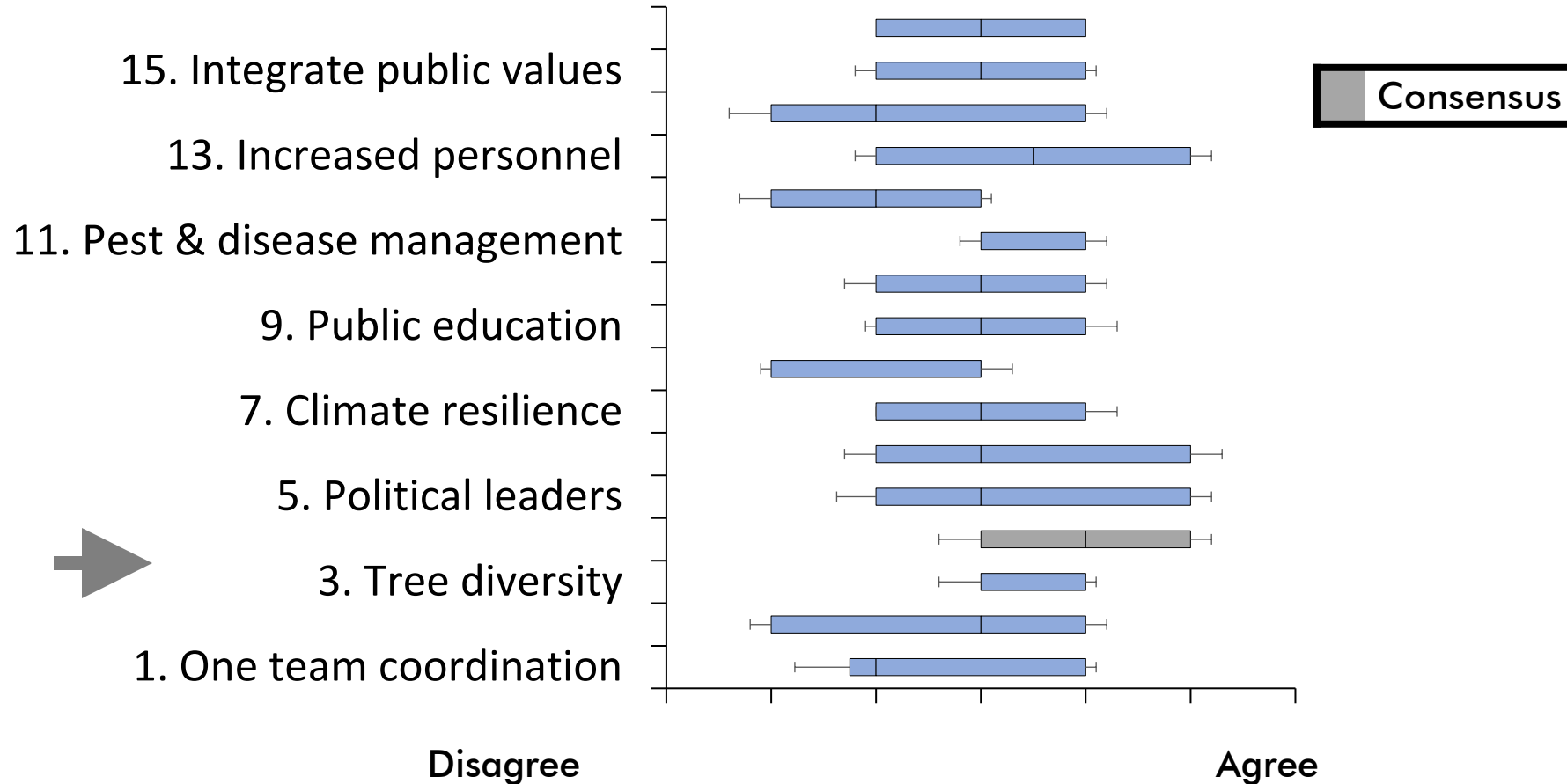


% of achievement

Views on Canadian UFMP implementation

n = 118

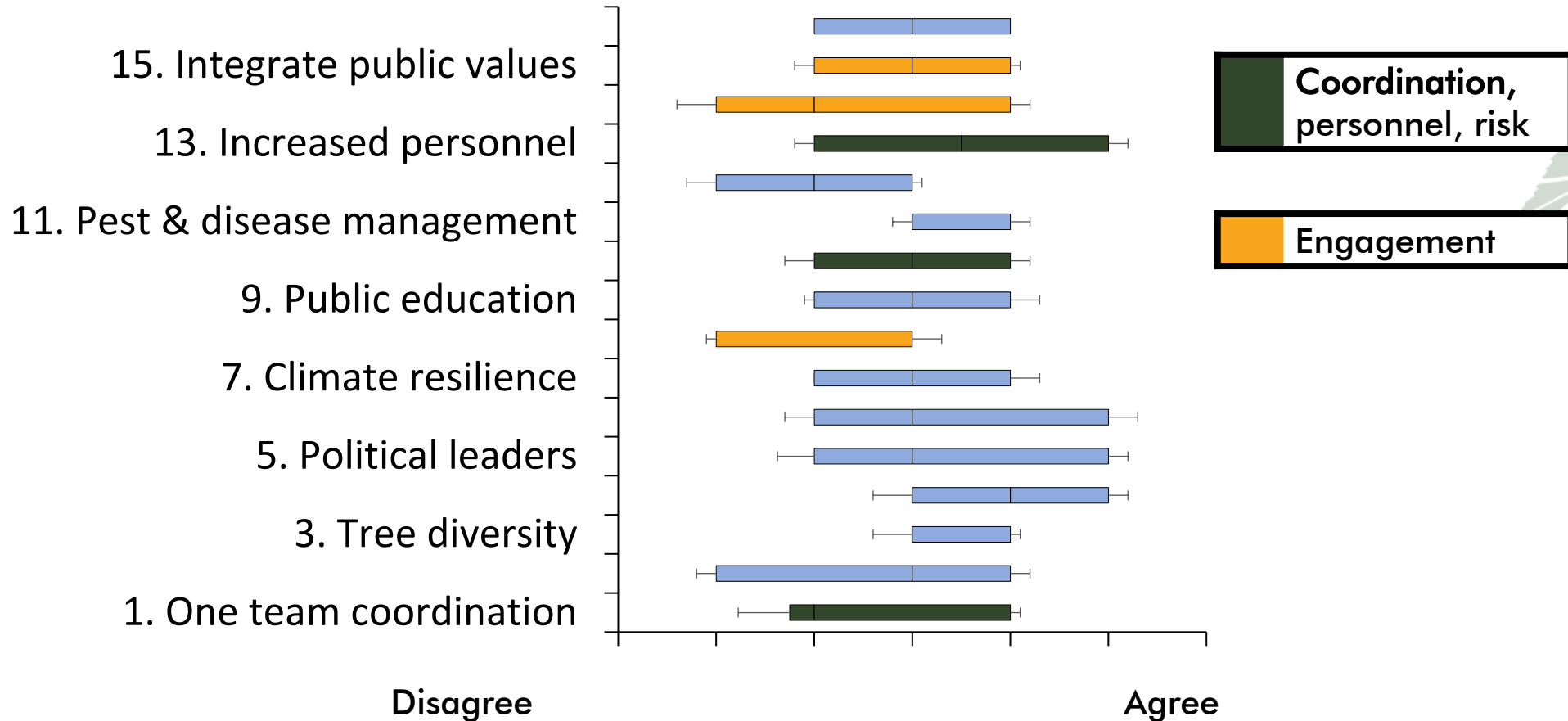
Different views on outcomes



Views on Canadian UFMP implementation

n = 118

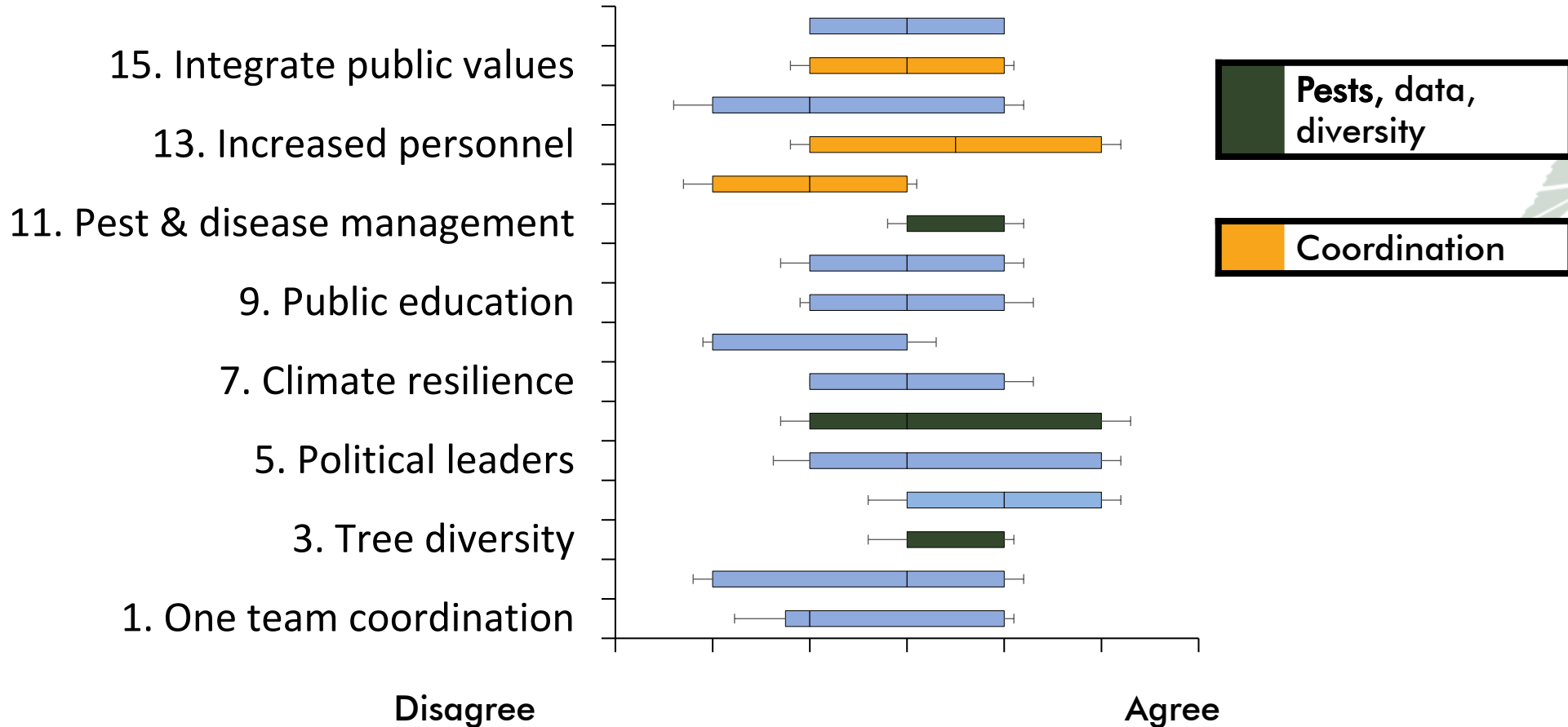
Different views on outcomes



Views on Canadian UFMP implementation

n=118

Different views on outcomes



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



Arbor Day
Foundation

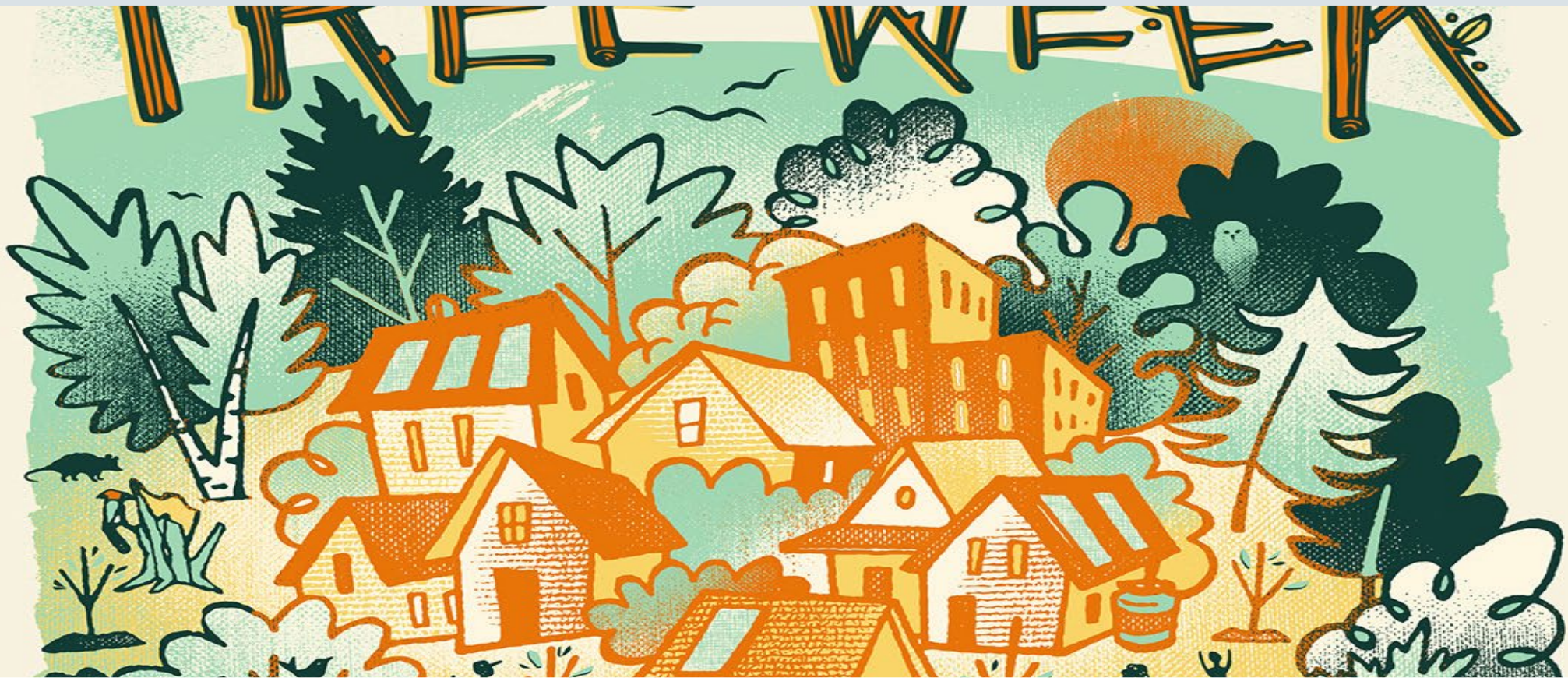


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2023



**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





***"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

- 2018**
- Total Events:
 - Lexington – 40+

2019

- Total Events
- Lexington – 50+

- 2020**
- 98% Virtual
 - Lexington events – 60+
 - Other KY communities joined

2021

- Still cautious
- Lexington events – 60+
- Continuing to reach beyond Lexington

- 2022**
- Back into the swing
 - Lexington events – 70+
 - Now in 6 other KY communities

2023

- Lexington events – 90+!
- Now reached into 12 other KY communities

FOR INFORMATION ON YOUR COMMUNITY, CHECK OUR WEBSITE
[HTTPS://UFI.CA.UKY.EDU/TREEWEEK](https://ufi.ca.uky.edu/treeweek)



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 | LFUCR - Division of Environmental Services
- Toyota Biodiversity Trail Walk**
120 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 Castlewood Drive | Castlewood Park
Tree Week Planning Team
- 5:30 PM - 7:30 PM** - Conjure an Exhibition of Photographs Consecrating the Natural World
209 Castlewood Drive | Historic Loudon House at Castlewood 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, 100pm
-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, 100pm
-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

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

TREE WEEK

tree week Celebration

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.

tree week Celebration

October 6-15, 2023

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

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
 - 200 E Main St.
 - Lexington, KY 40507

URBAN FOREST INITIATIVE PRESENTS

TREE WEEK

? Questions ?



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

2023



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Washington DC, 2023

The Key to Resilient Cities and Climate Adaptation

Surveying German Attitudes Towards Urban Green Spaces

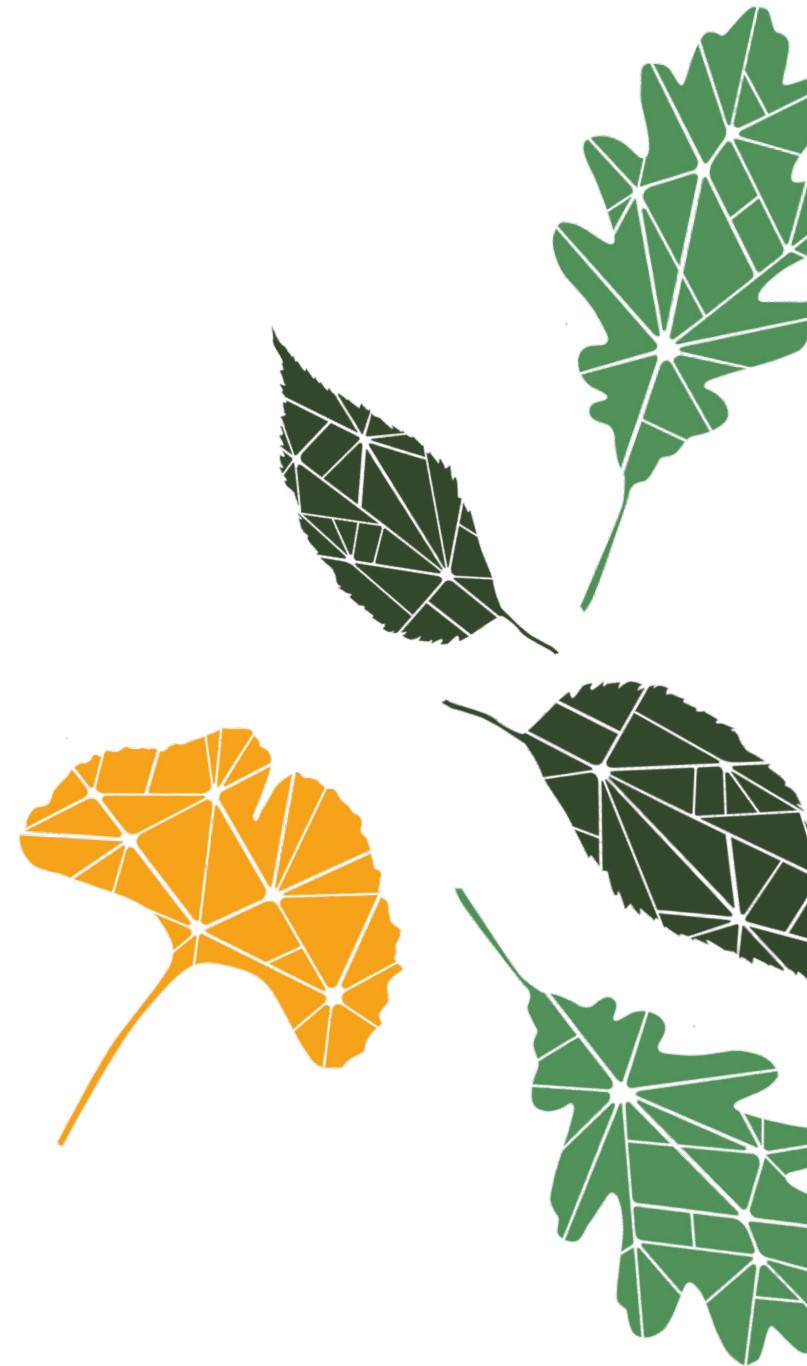


Presented by

Rita Sousa-Silva

YAS, University of Freiburg, Germany

CML, Leiden University, The Netherlands



A photograph of a park with a bench and trees. The foreground is a grassy field with a paved path and a bench. The background is a dense line of trees under a clear blue sky. Pine branches are visible in the upper corners, framing the scene.

THE ROLE OF URBAN GREEN SPACES IN MITIGATING HEAT STRESS

Rita Sousa- Silva & Chad Zanocco

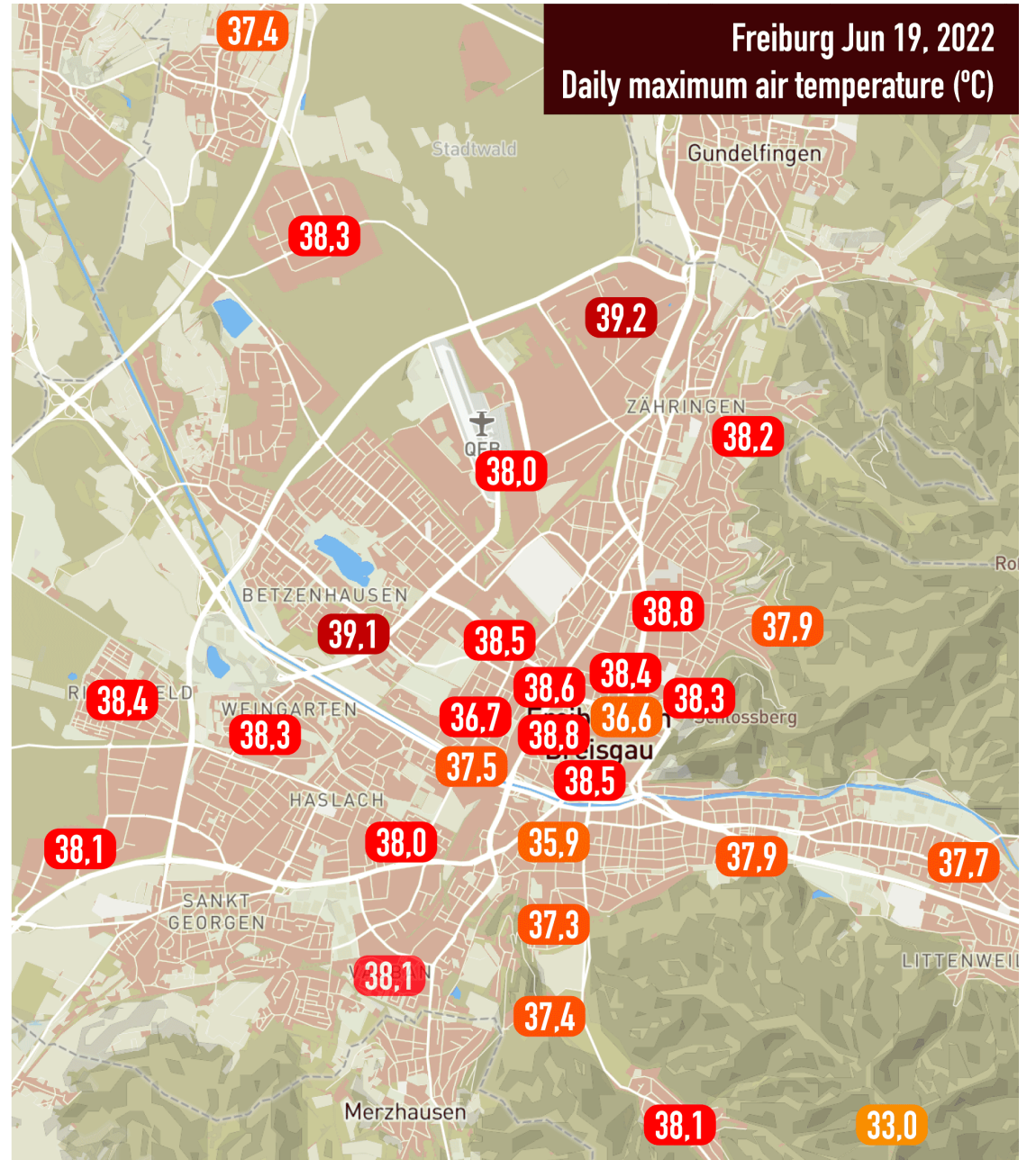
12:01 p.m. ET, July 19, 2022

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

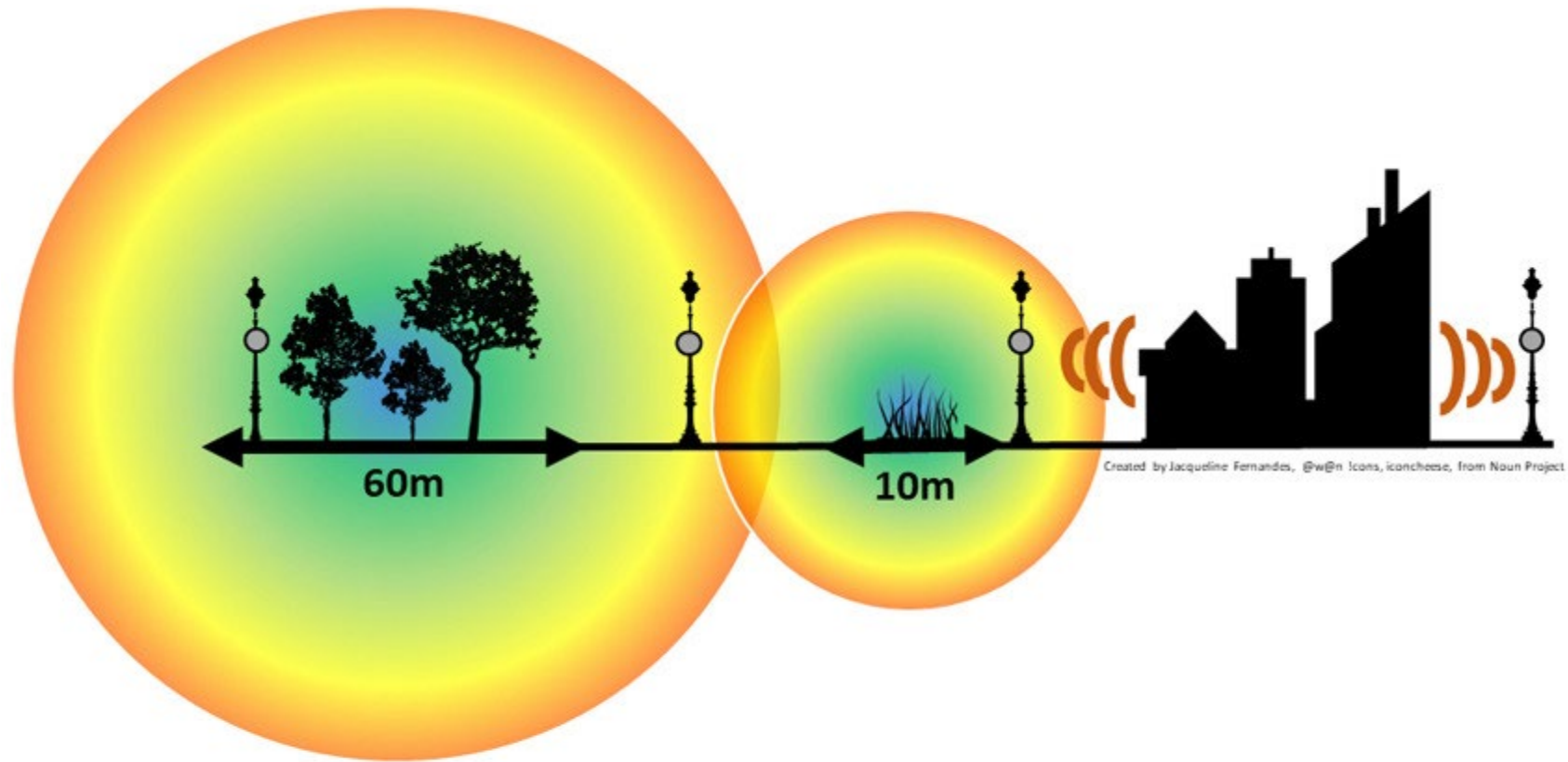
A modelling study of 93 European cities suggests that more than 2600 human heat-related deaths over just three months could have been prevented if these places increased their average tree coverage from 15 per cent to 30 per cent



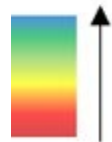
ENVIRONMENT 31 January 2023

By [Madeleine Cuff](#)





Green spaces' cooling effect



↑ Lower temperature; Higher relative humidity



Land-cover's distance of influence

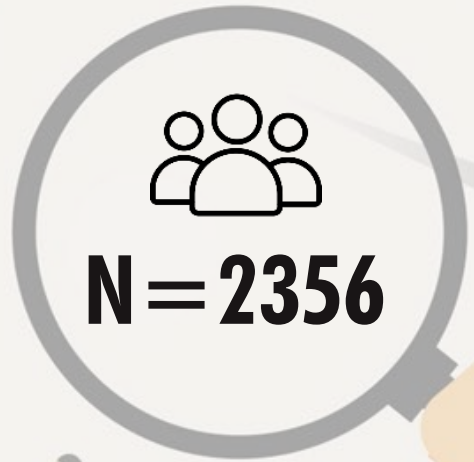



Urban heat island

A photograph of a park with a bench on a path, framed by pine branches. The scene is a wide, open grassy area with a paved path running horizontally across the middle. A single metal bench is positioned on the path. In the background, there is a dense line of trees with varying shades of green. The foreground is dominated by the dark, out-of-focus branches of a pine tree, which frame the top and sides of the image. The sky is a clear, pale blue.

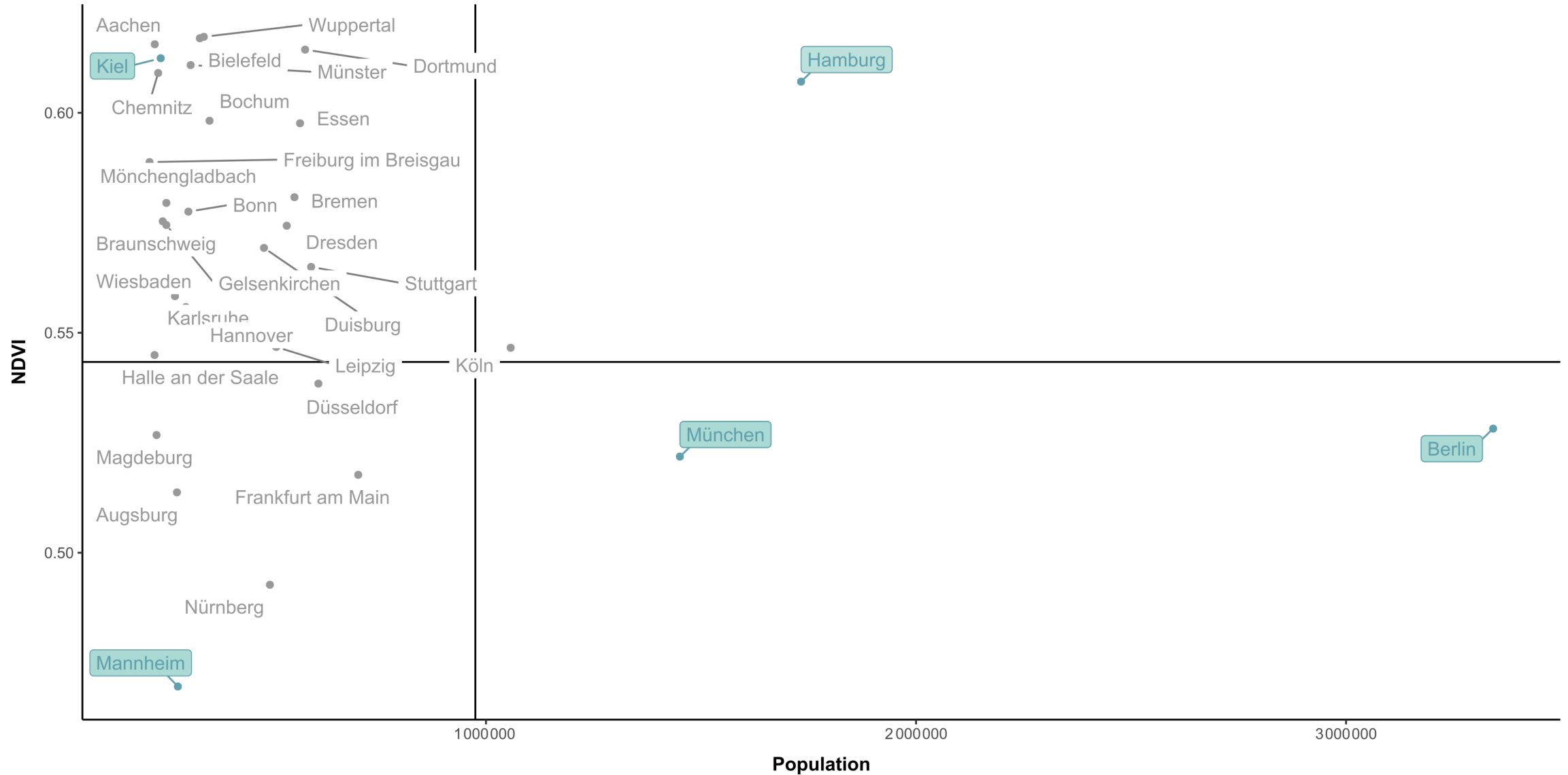
CAN URBAN GREEN SPACE BE A LEVER WE CAN PULL
TO MITIGATE URBAN HEAT AT LOCAL SCALES?

STUDY POPULATION

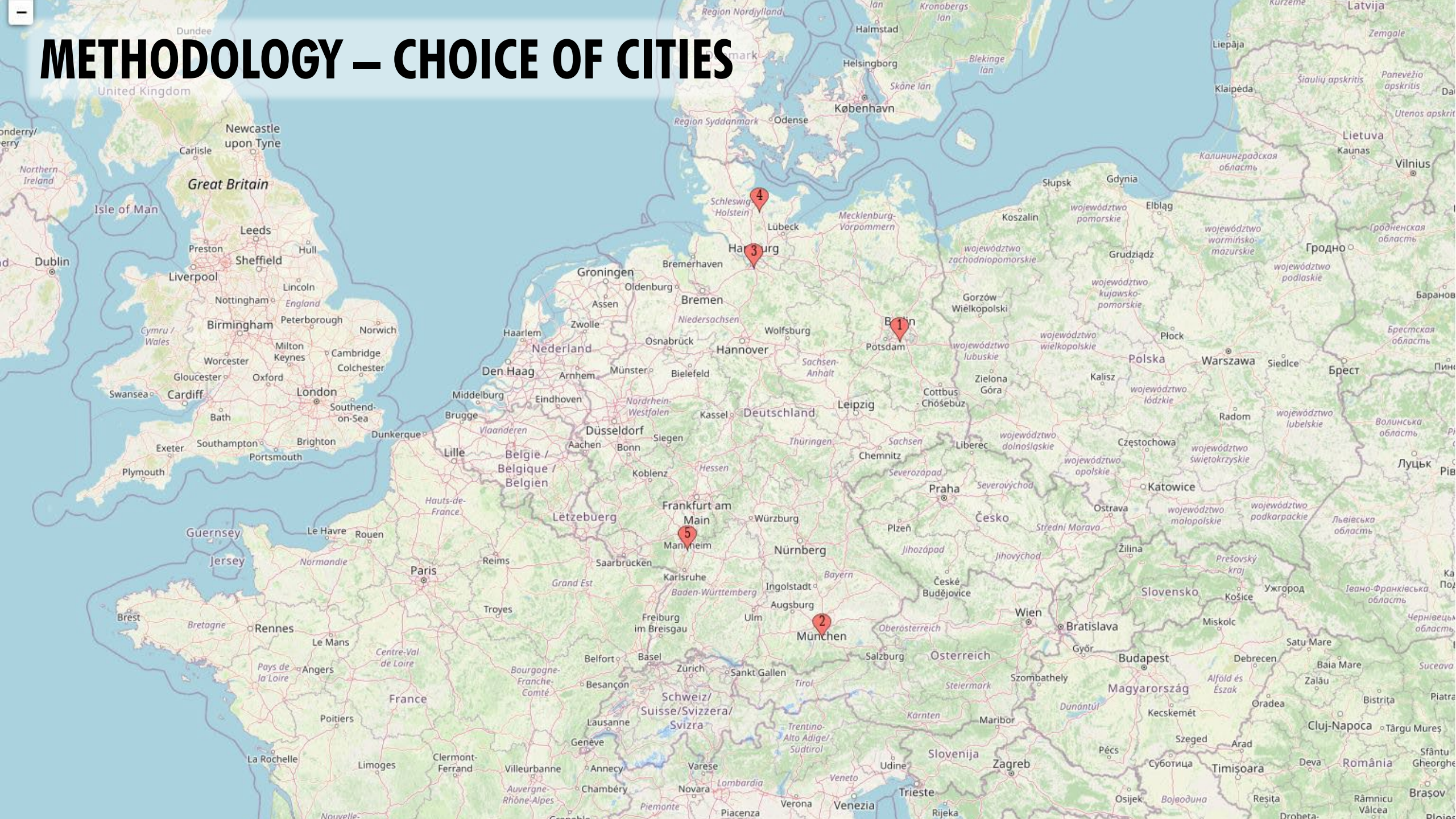



N=2356

METHODOLOGY – CHOICE OF CITIES



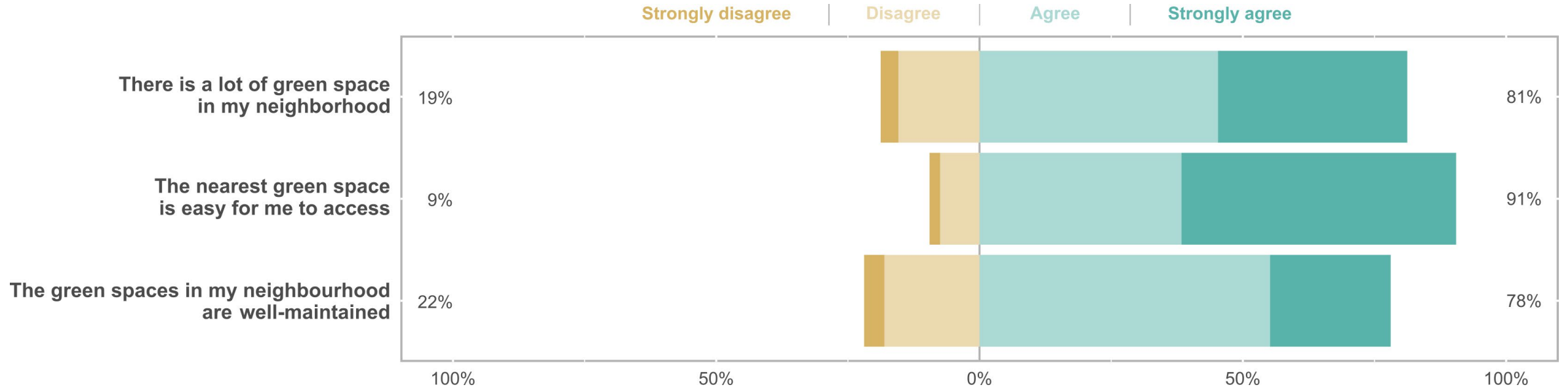
METHODOLOGY – CHOICE OF CITIES





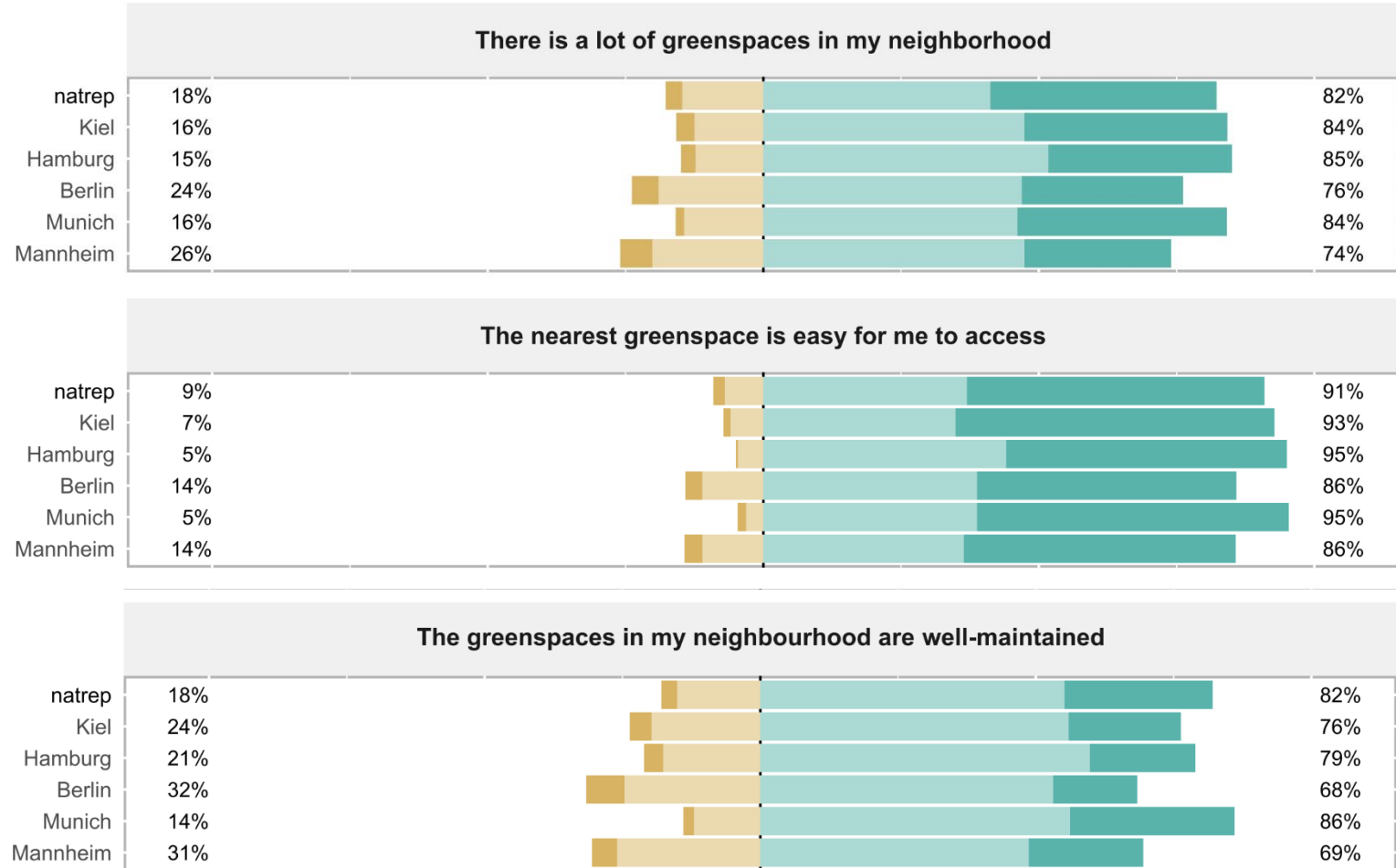


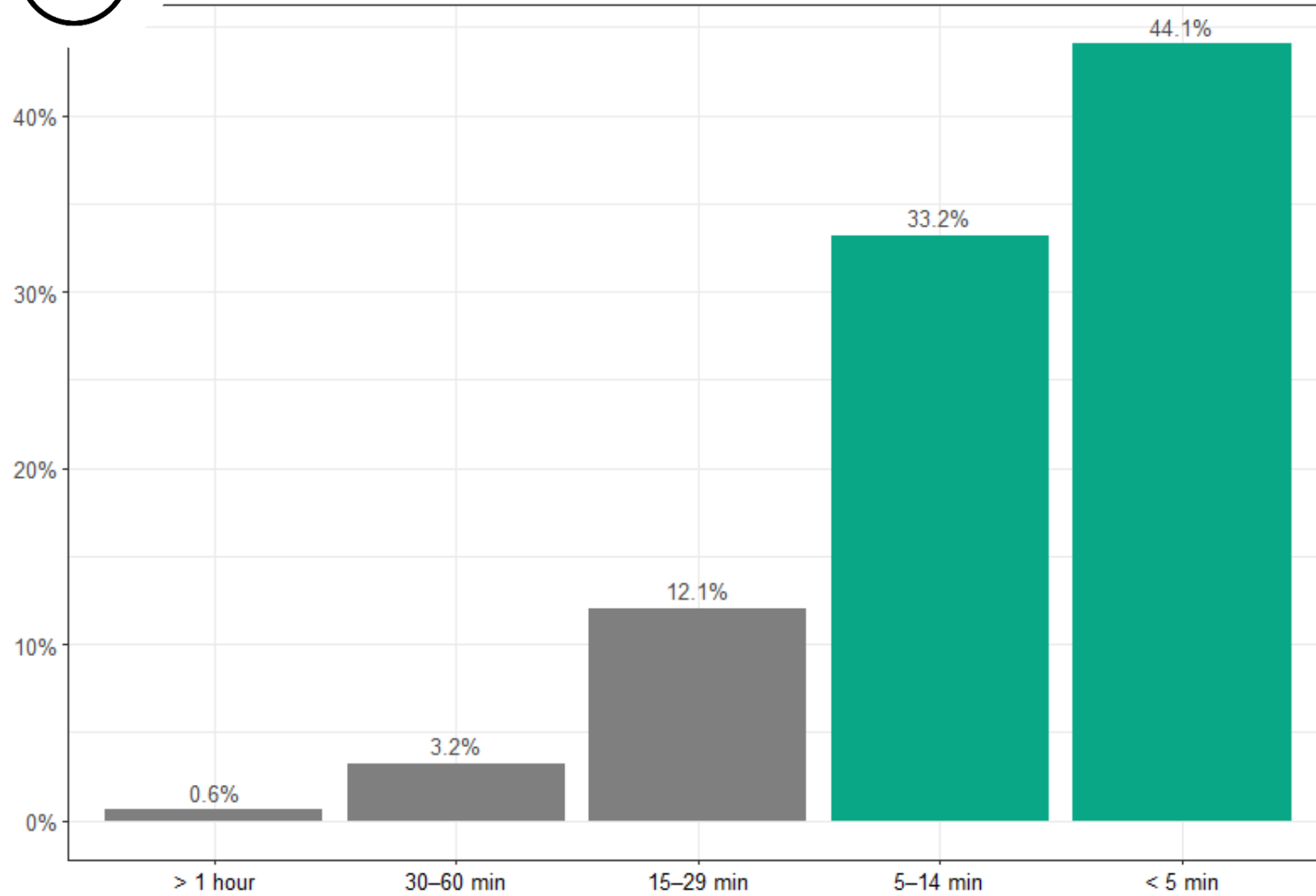
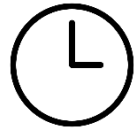
“ Areas with vegetation in public and private areas, including parks, gardens, lawns, tree alleys, green roofs, cemeteries, etc. ”





Strongly disagree | Disagree | Agree | Strongly agree







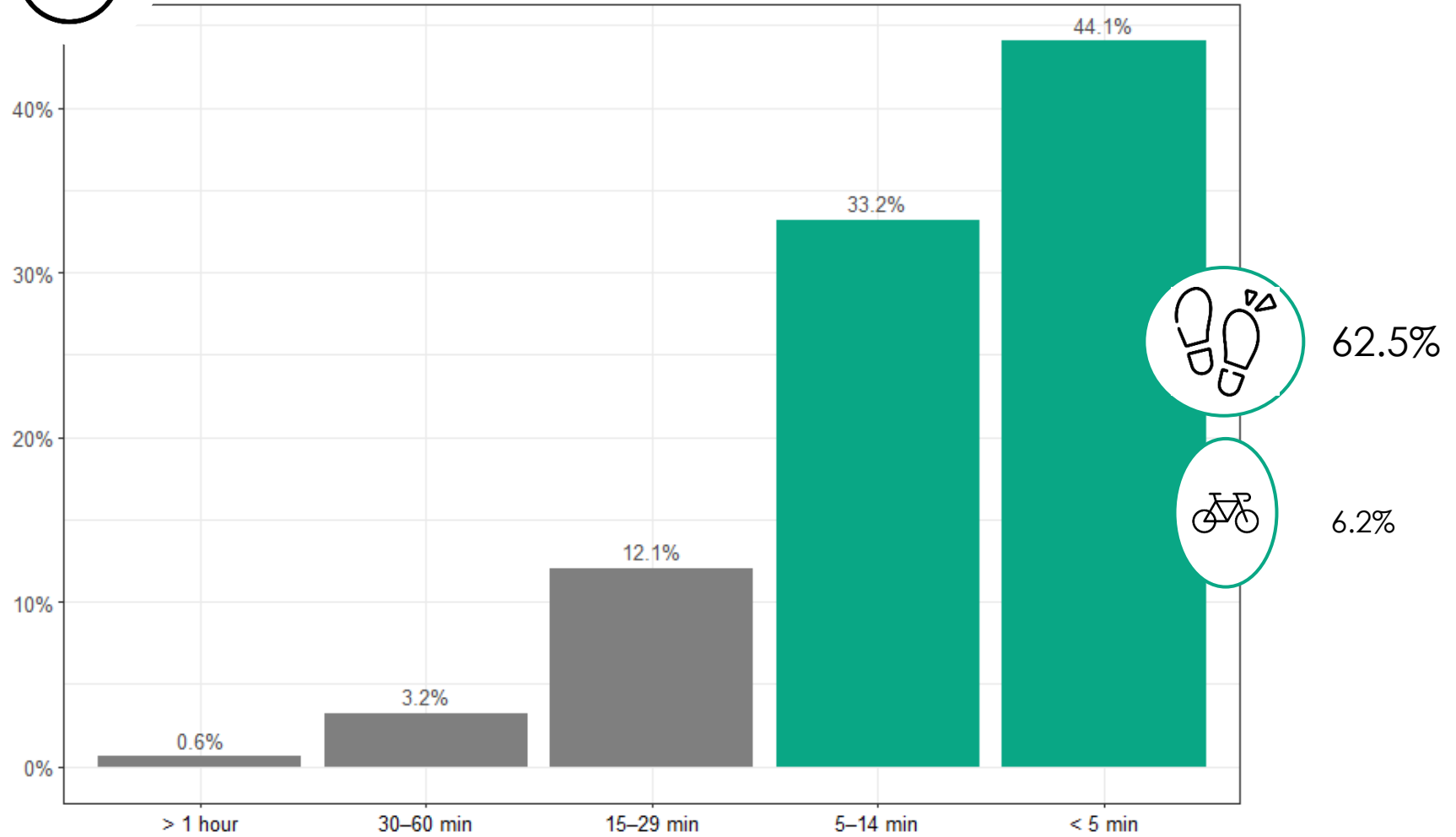
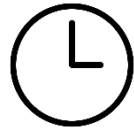
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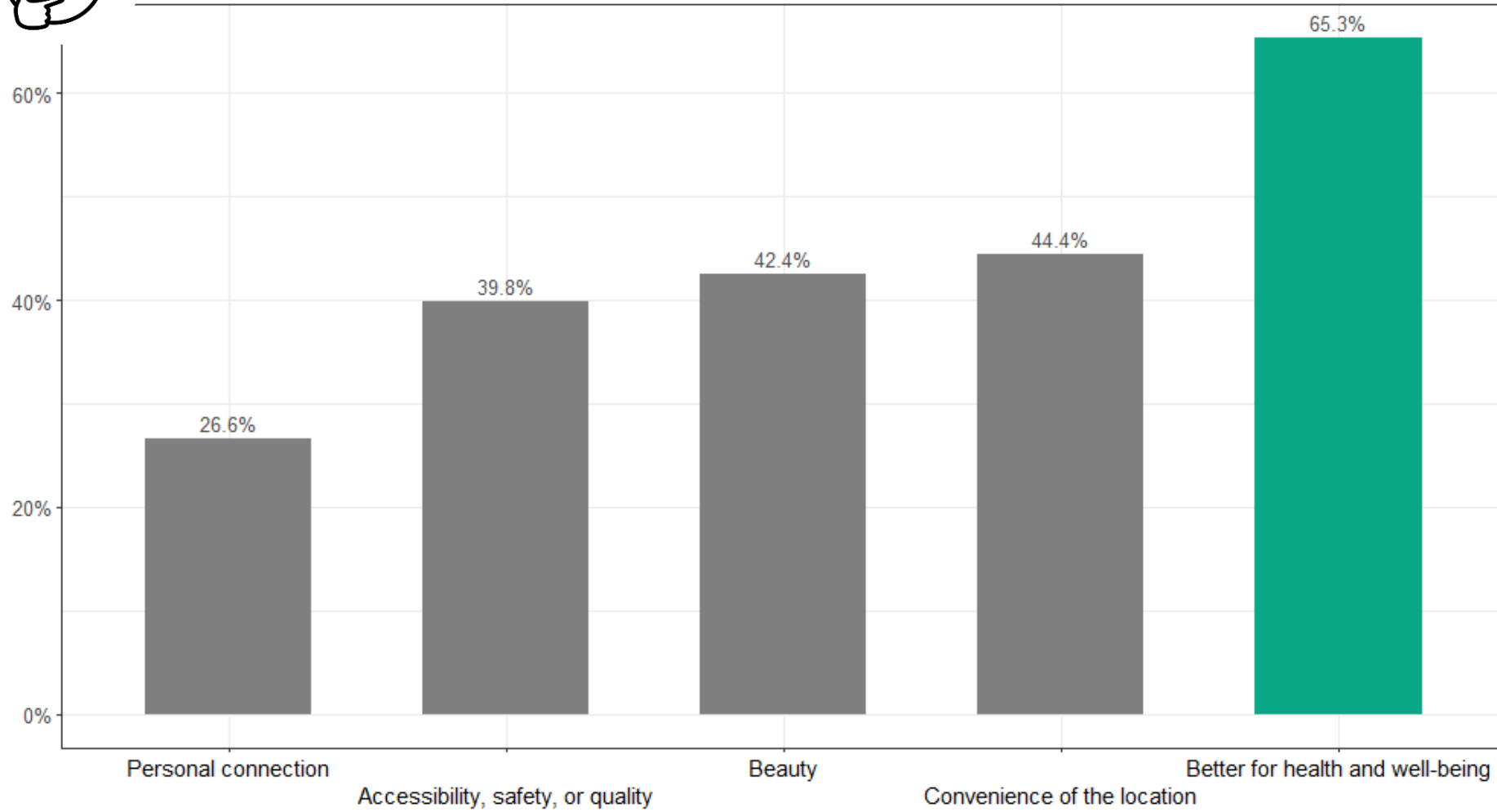
Washington DC, 2023



N=182

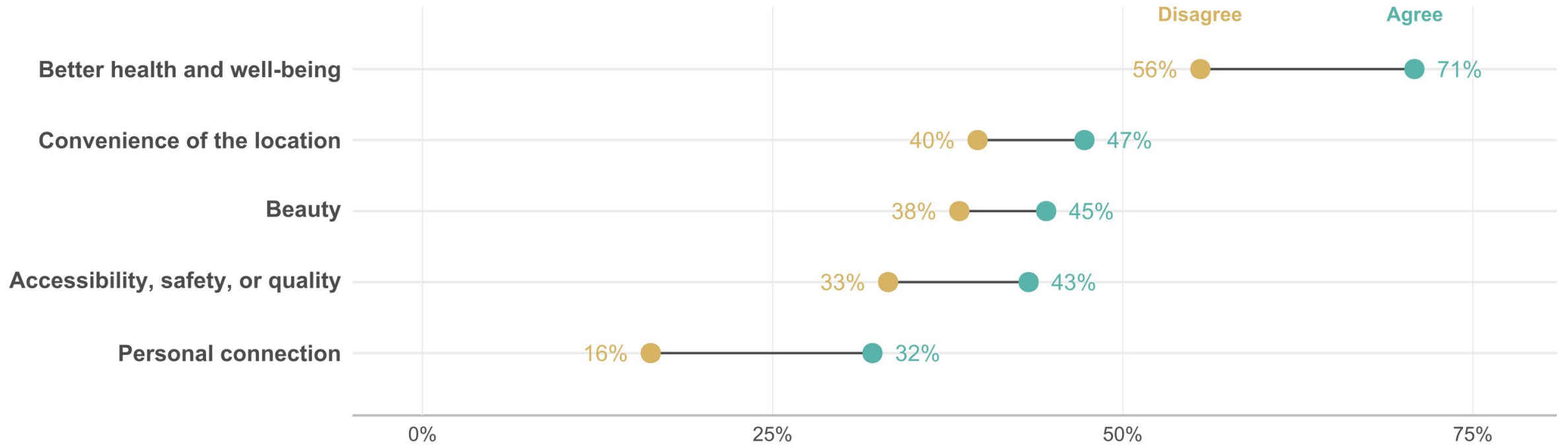
0







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



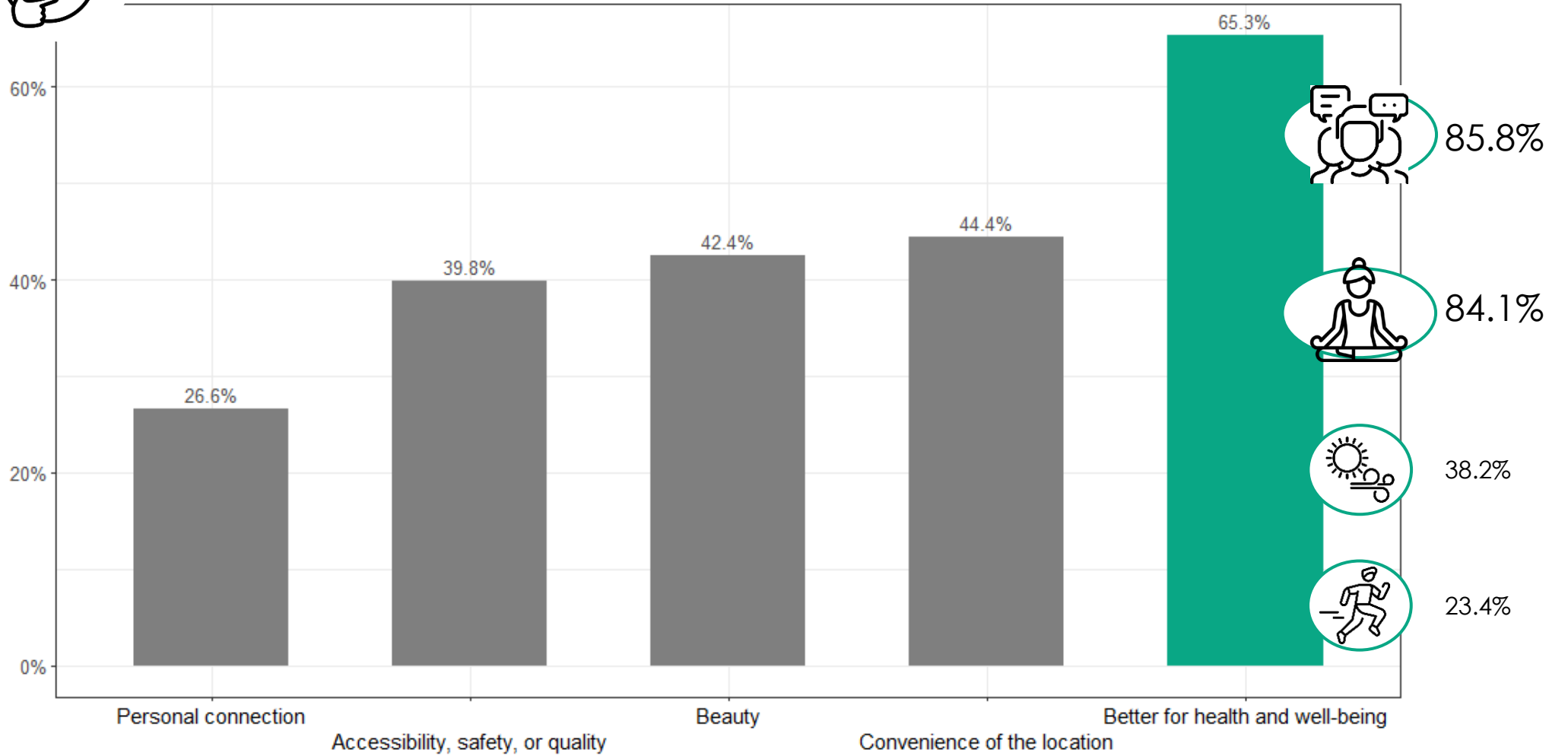
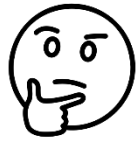


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8



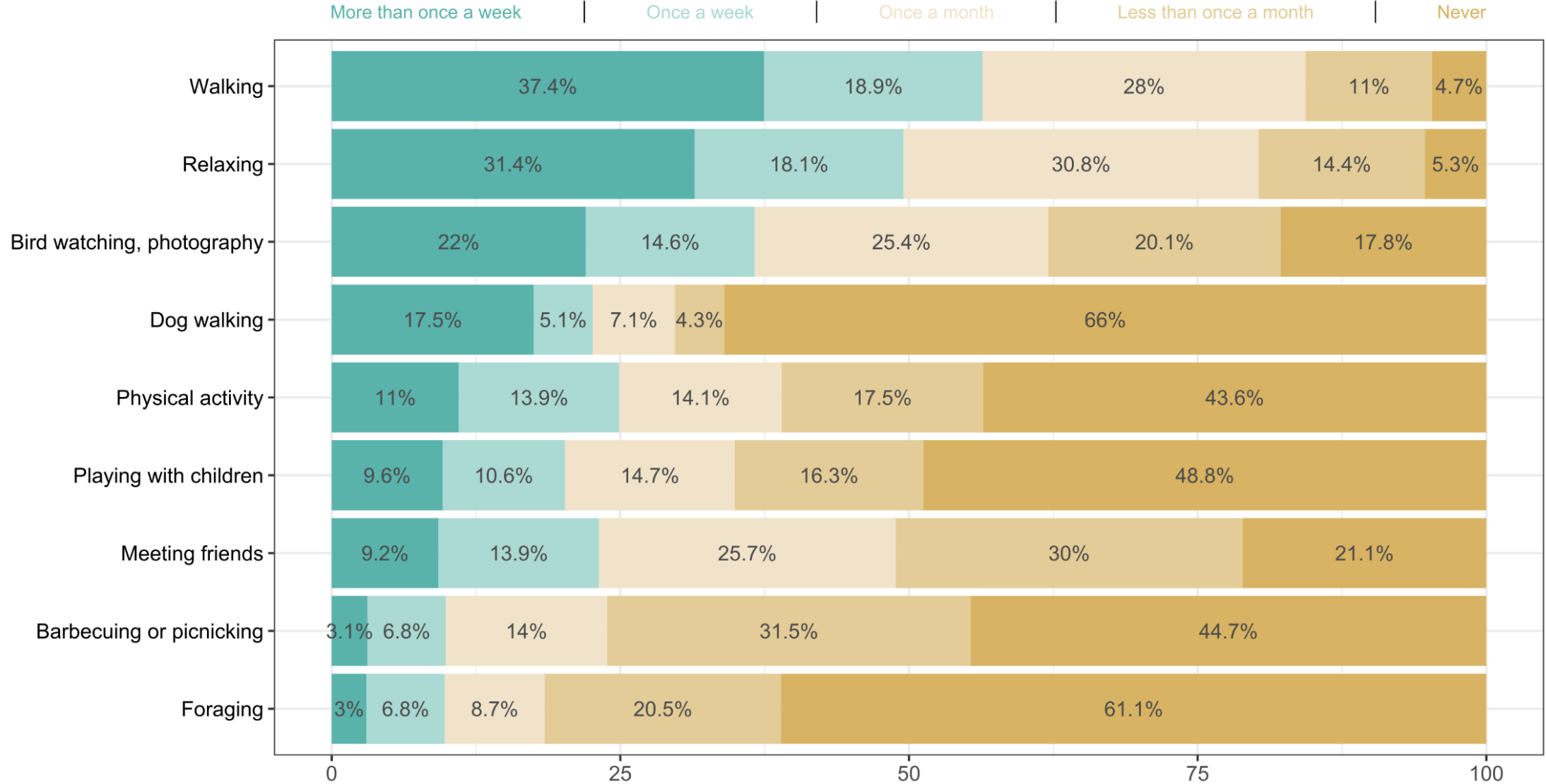


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7





USE OF URBAN GREEN SPACE
DURING VERY WARM DAYS

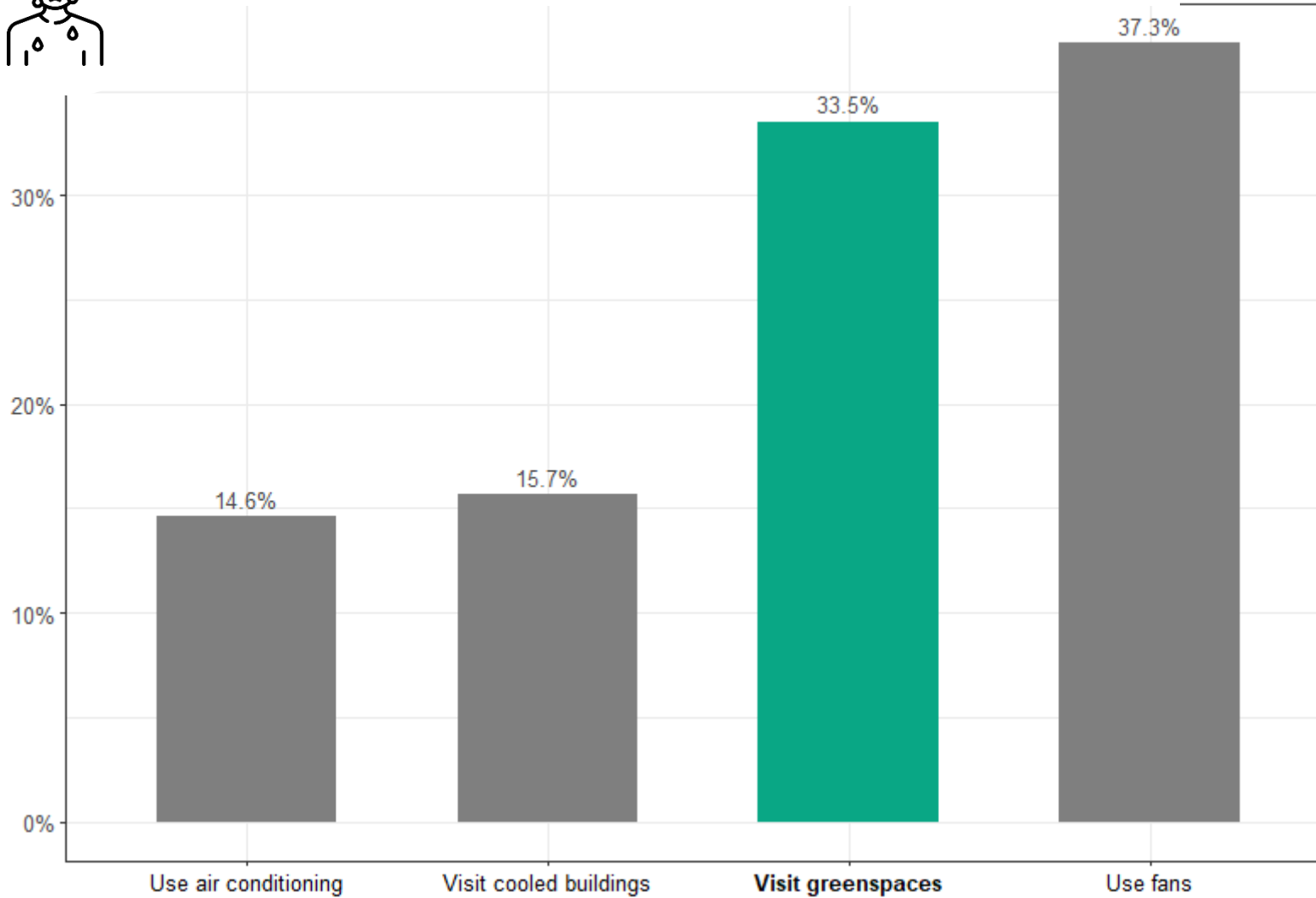


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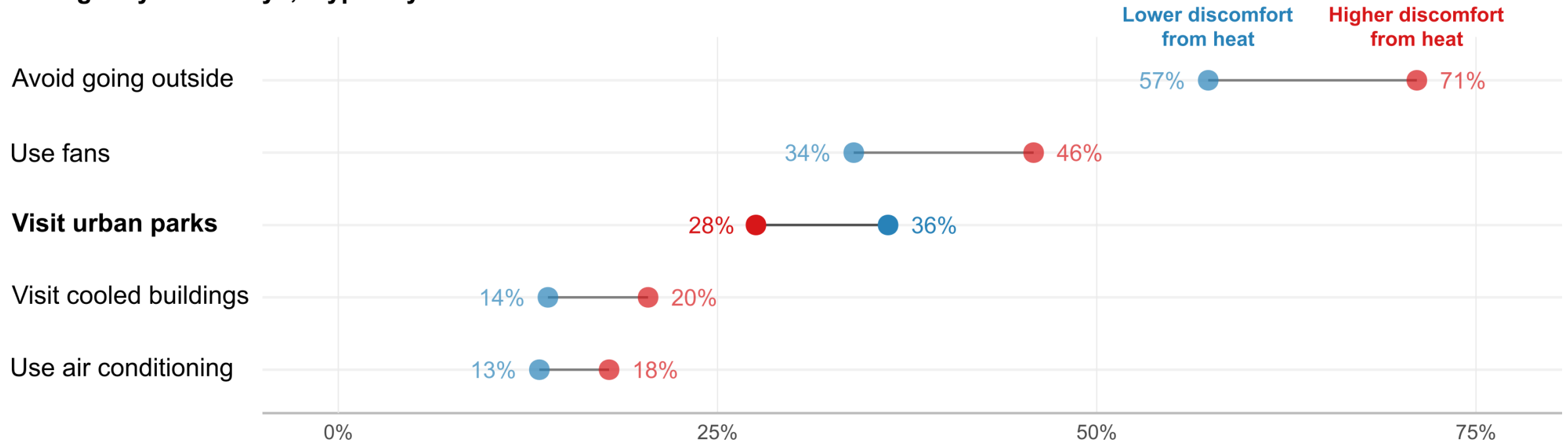


6



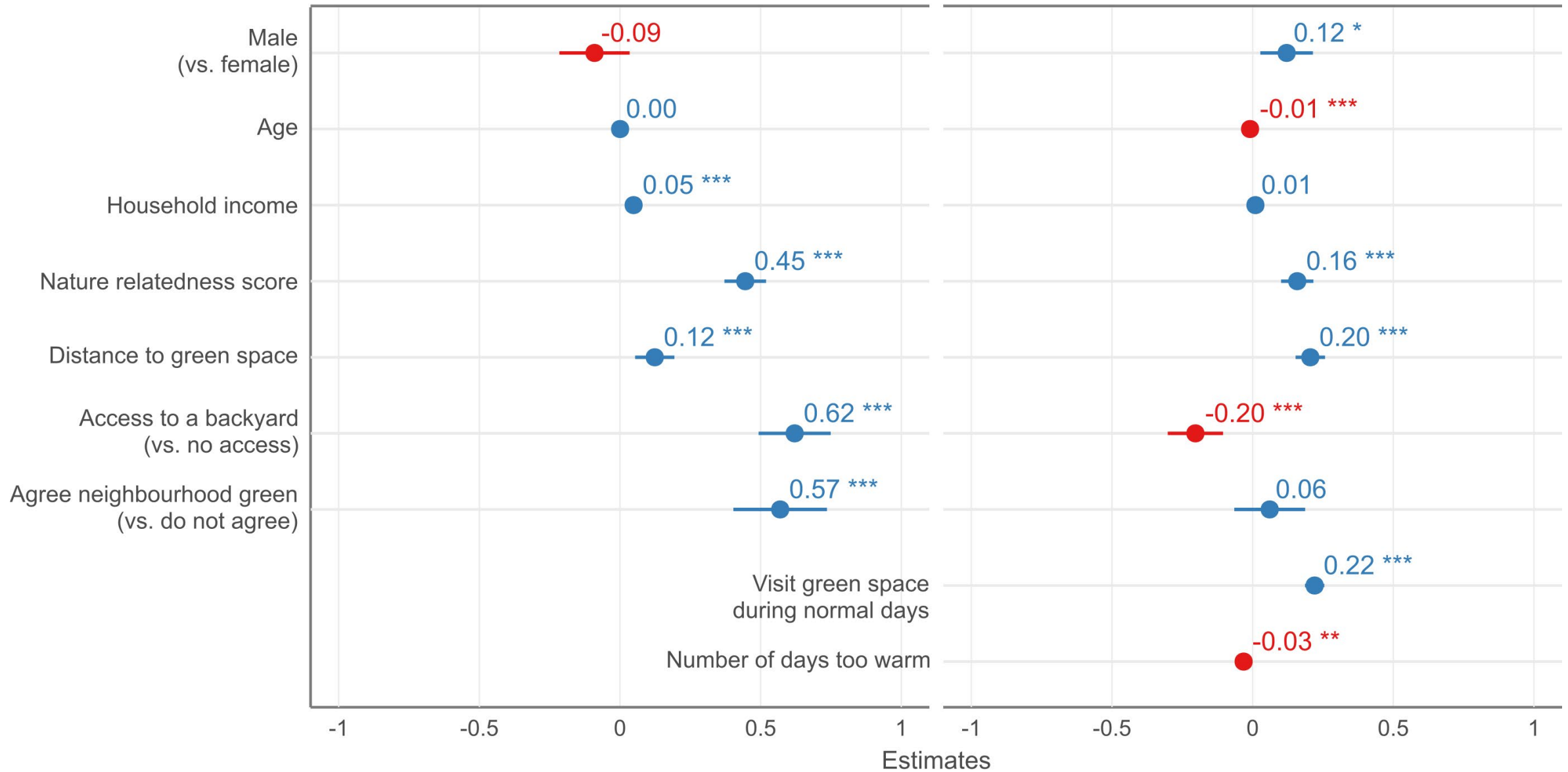


During very warm days, I typically...



a) Visit green space during *normal days*

b) Visit green space during *very warm days*



SUPPORT FOR POLICIES





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Strongly disagree

Disagree

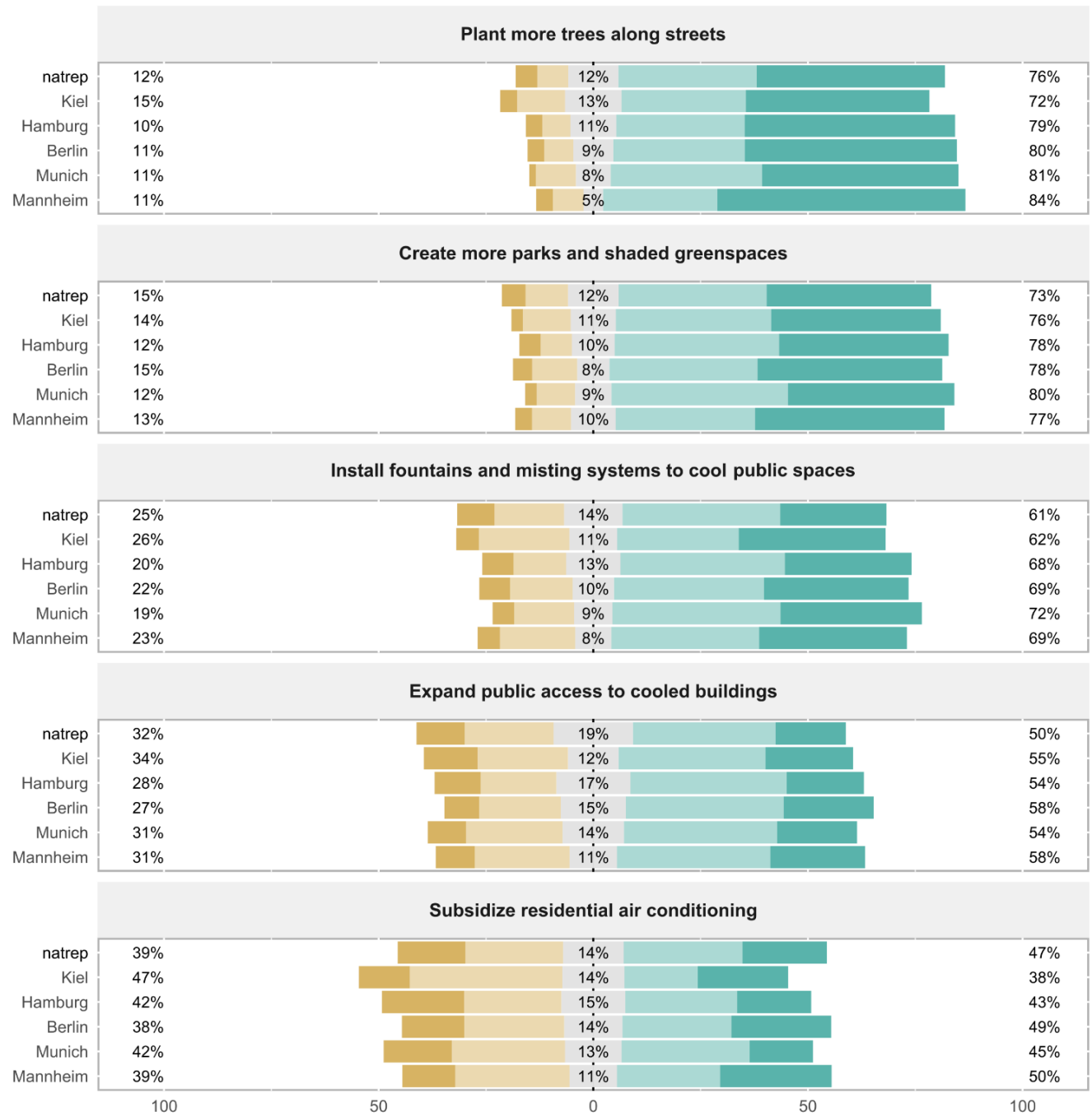
Neutral

Agree

Strongly agree

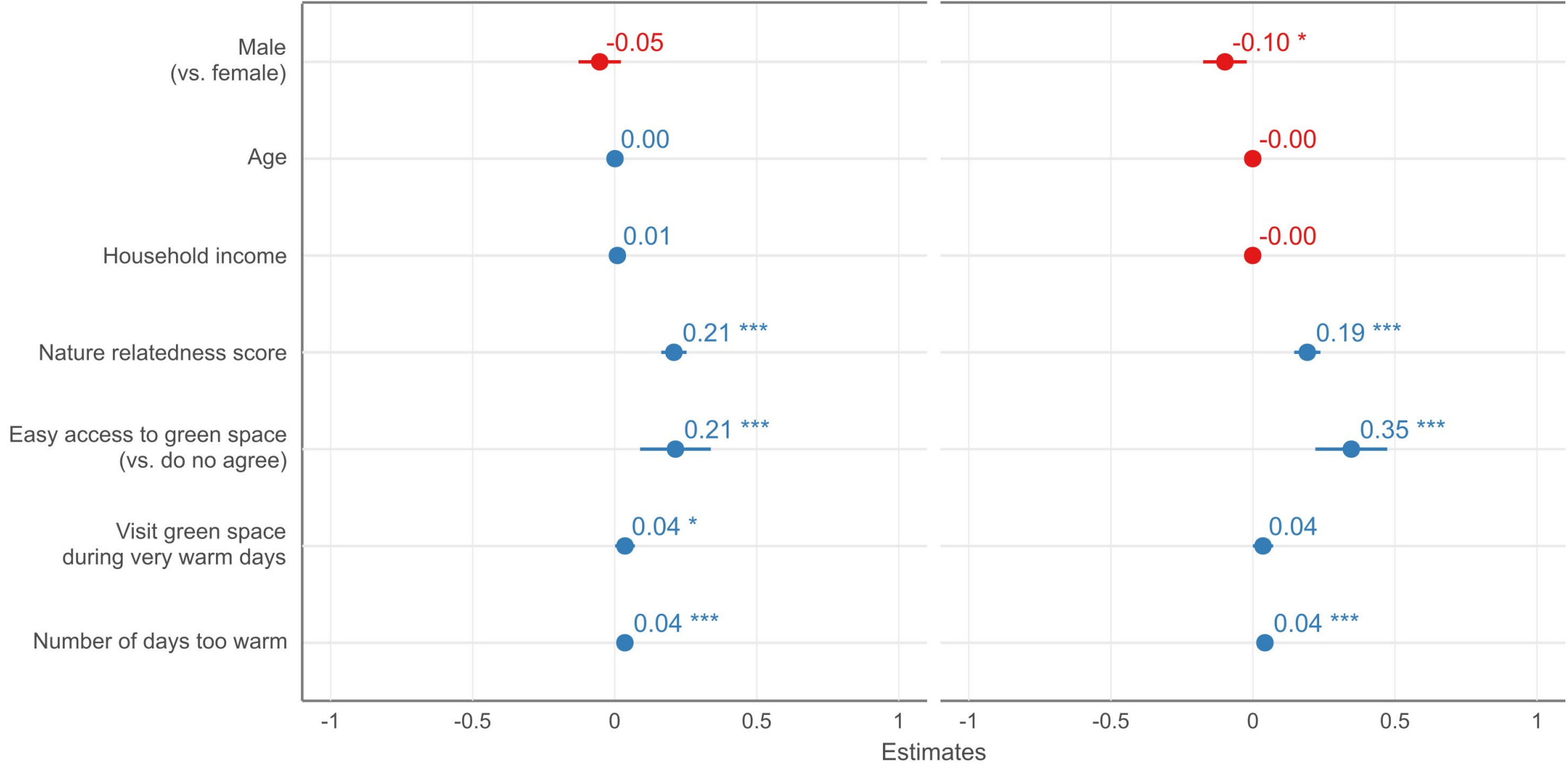


6



a) More parks

b) More street trees



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 | Stanford University
Leiden University**

 **a.r.de.sousa.e.silva@cml.leidenuniv.nl**

 **RitaSSilva**

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Tree New Mexico

It takes a City



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



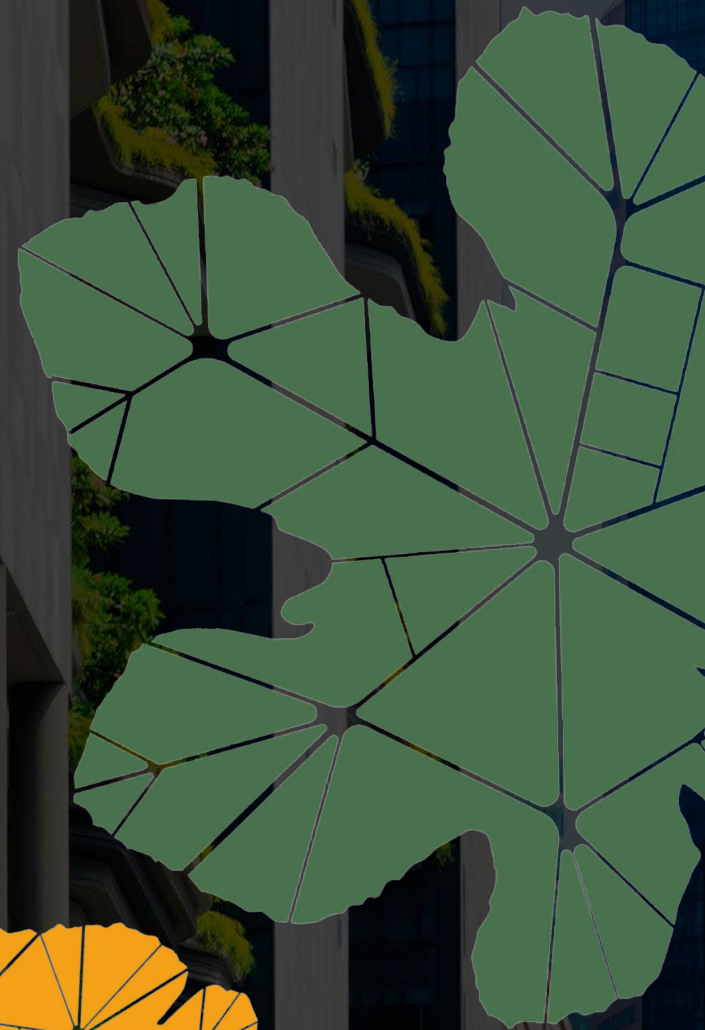
What is ABQ NeighborWoods?

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.

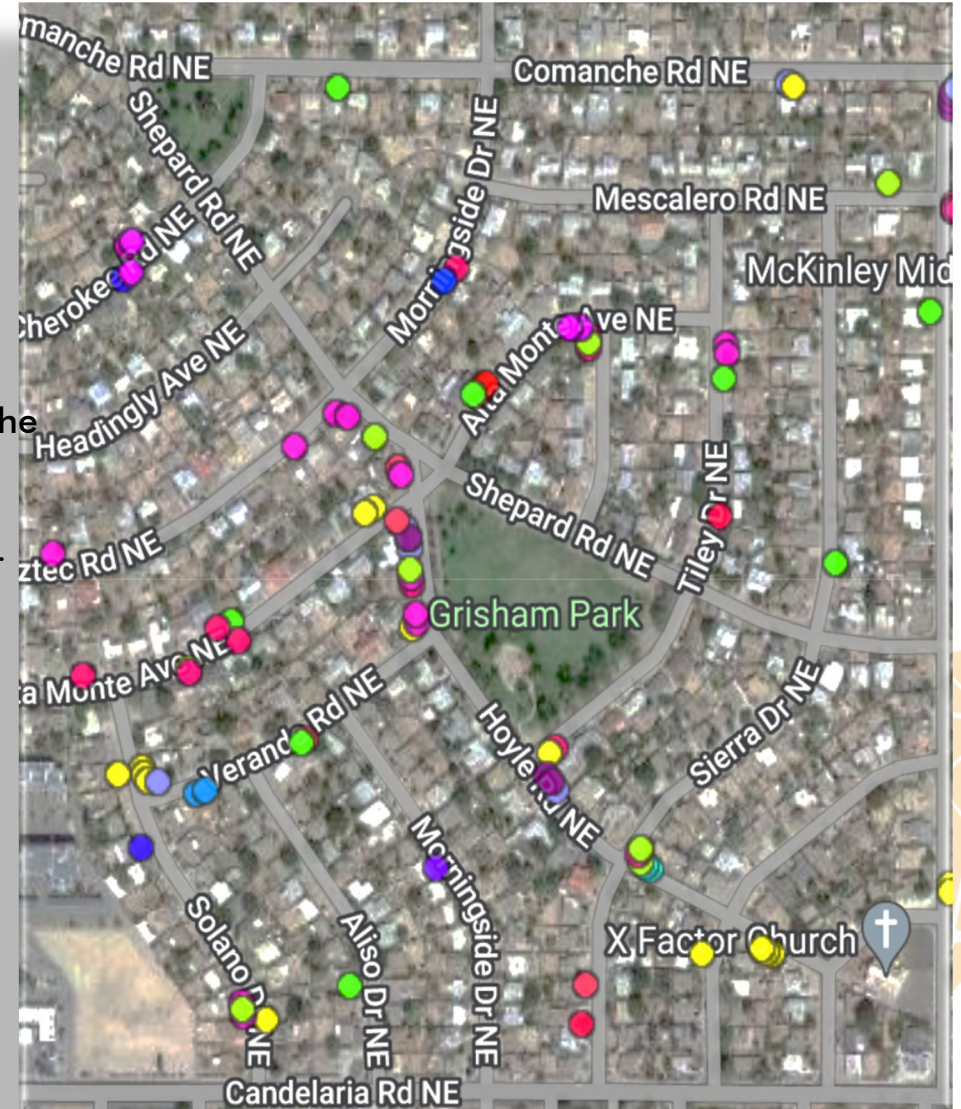




Then: Maps and Holes



- 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:

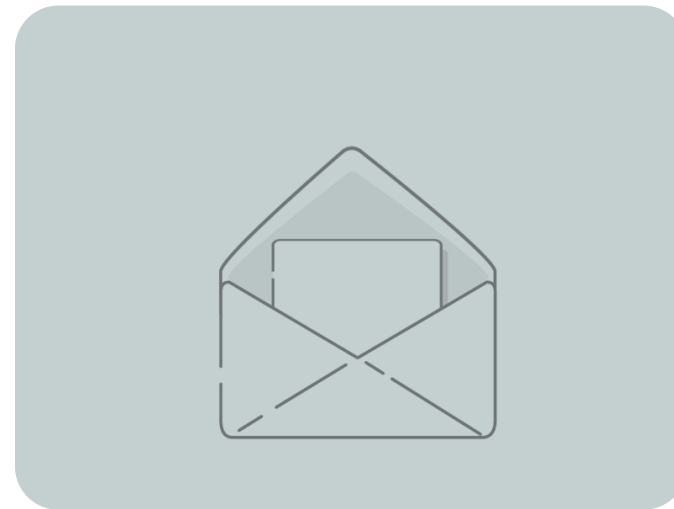
- ✓ Tree is planted.
- ✓ Tree is watered.
- ✓ Tree is staked if needed.
- ✓ Verifies that the planting site is cleaned up and looks as good as possible.
- ✓ Tools are checked back in and undamaged.
- ✓ All tools are cleaned, and the big ones returned to storage.





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 3rd 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.

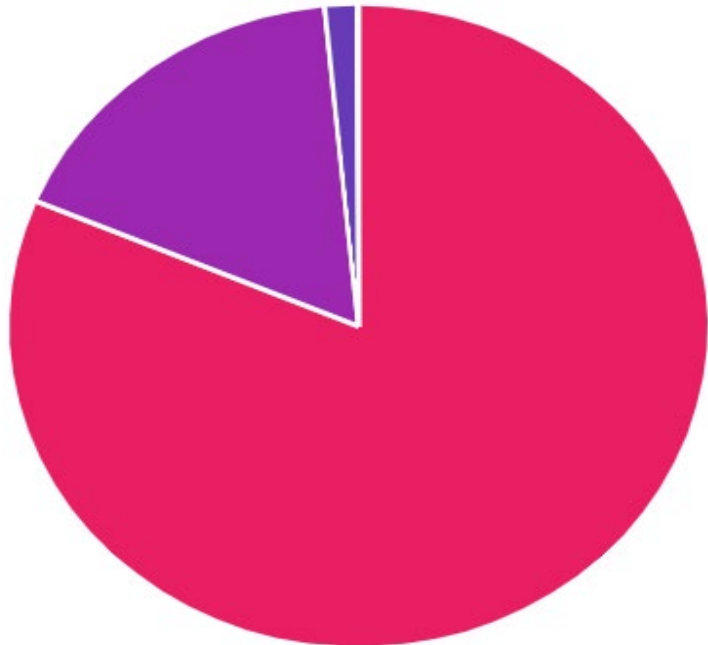




THREE YEAR AVERAGE

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%





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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

Amy Bell /

amy@groundworkstudio.com

Kelly White / kelly@treenm.org



Food and Agriculture
Organization of the
United Nations



Arbor Day
Foundation



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



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 Database for New User Data

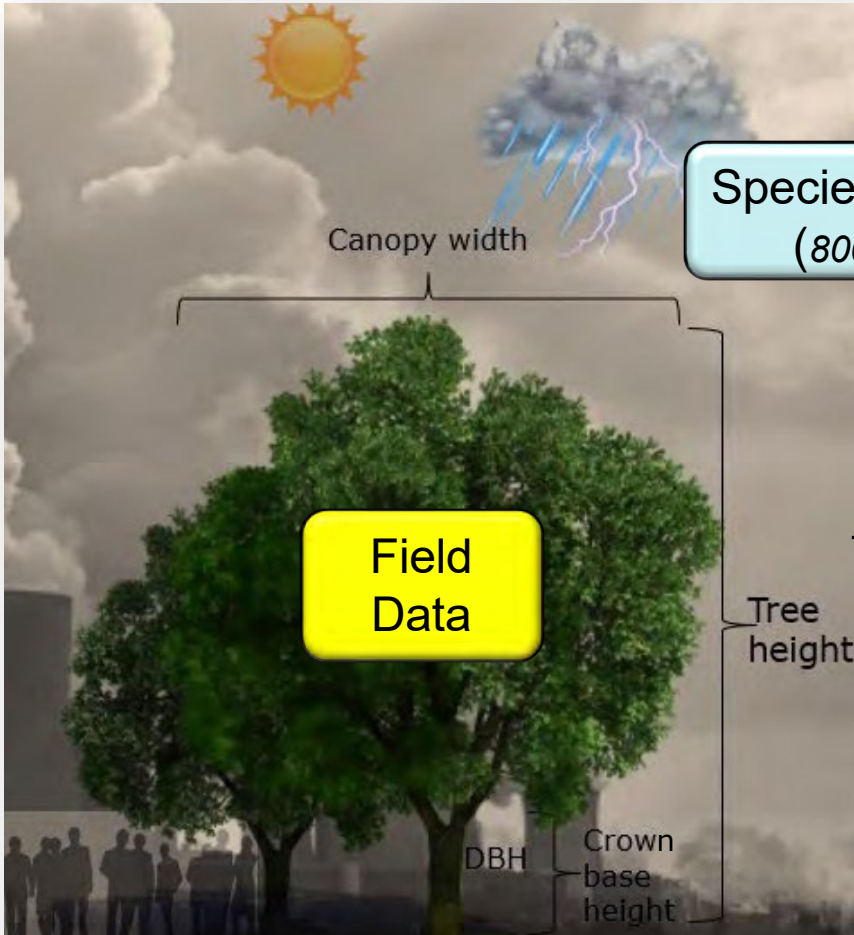
City Data

Pollution Data

Precipitation Data

Species Data
(8000+)

Location Data



VOC

Carbon

Air Quality

Hydrology

Energy

Structure

Value

Forecast



i-Tree Eco

Whole country integrations:

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



UKRAINE

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:

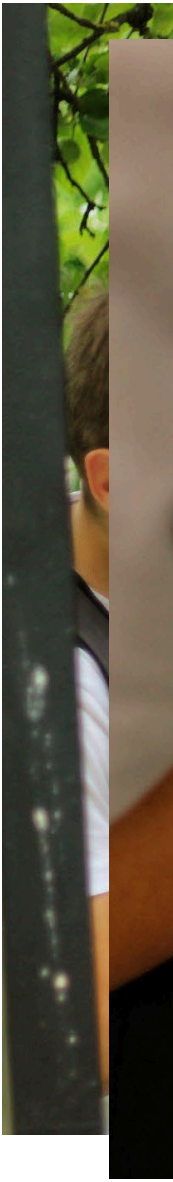
- ❑ 28 applications, including communities from Eastern and Southern Ukraine situated very close to active military operations;
- ❑ 5 applications received on February 24 and later.

1	Позначка часу	1. Назва ОТГ:
14	12.02.2022 00:10:12	Коблівська сільська територіальна громада
15	15.02.2022 11:15:26	Марківська селищна територіальна громада
16	15.02.2022 17:16:47	Бережанська міська територіальна громада
17	17.02.2022 10:43:22	Хустська міська територіальна громада
18	18.02.2022 13:08:00	Маріуполь
19	19.02.2022 20:47:00	Болехівська територіальна громада
20	21.02.2022 14:28:27	Новороздільська міська територіальна громада
21	22.02.2022 14:29:36	Великописарівська селищна територіальна громада
22	23.02.2022 00:06:40	Роганська селищна територіальна громада
23	23.02.2022 11:29:50	Первомайська міська територіальна громада
24	23.02.2022 13:00:13	Надвірнянська міська територіальна громада
25	24.02.2022 14:34:51	Чернівецька територіальна громада
26	26.02.2022 13:37:35	Беселинівська селищна територіальна громада
27	28.02.2022 09:10:29	Лирятинська міська територіальна громада
28	01.03.2022 15:08:09	Китомирська міська територіальна громада
29	26.04.2022 14:03:05	Жгородська міська територіальна громада
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"

 **olexandra.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



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