Aalto University
School of Engineering

Participatory planning

SPT-E3010

6.3.2023

Today

	Theme:	Lecturer(s)
6.3.	Does mapping improve public participation?	Maarit Kahila-Tani Marketta Kyttä
	Opponents:	
	Aku Staff, Larissa Hollub, Nicolette Slagle, Nadezhda Zubova, Katharina Reusteck, Amelia Cardwell	

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DOES MAPPING IMPROVE PUBLIC PARTICIPATION?

Exploring the pros and cons of using PPGIS in urban planning practices

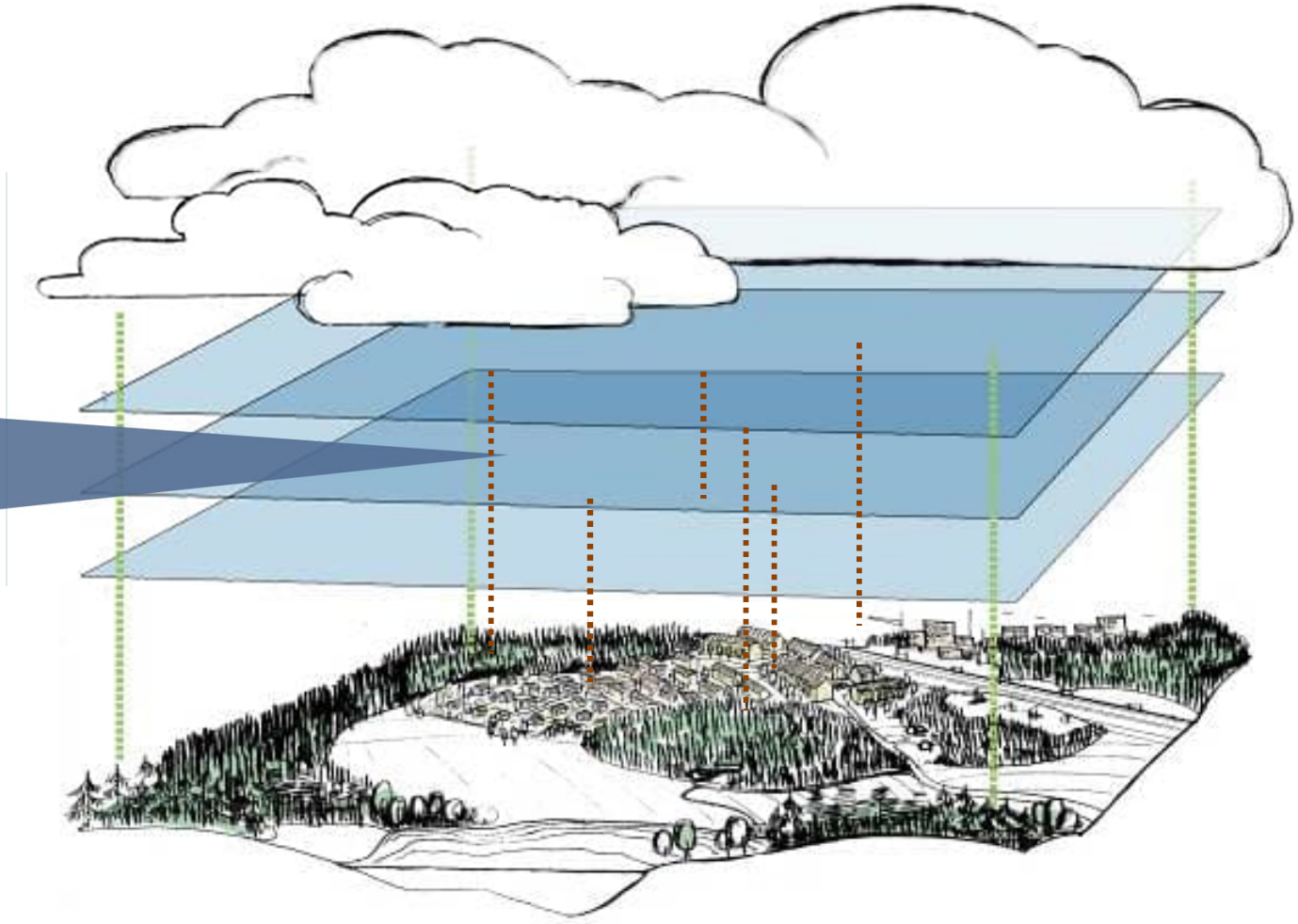
Maarit Kahila, Mapita Oy
Marketta Kyttä, Aalto

KEEP
PUBLIC LANDS
IN
PUBLIC HANDS
WILD
UTAH

Accept all the things that life gives you. Be adorable towards your life. If you can't argue with the death don't do it with life. - (ARZOO)
Live Young!
Grab a post-it.
Write, draw or doodle your story.
Just make sure it fits on one side.
Leave your name and numbe at the back.
Win Awesome Prizes.
Life is so awesome. Just change the way you see it.
Shruti Aditya
we are bro-sis
KISS Keep It Simple
Just Do It Rock
Keep Calm, Be happ, live happy - Anany
Keep Calm & Be Happy!! - Vedika
I Love Myself Stey Hungry Stey foolish
Enjoy your struggle Because once you succeed, you are going to tell the story of your success till you die. So, enjoy your struggle.
Who will read this he will mad from Yo Niru
Live the way you like! Just love yourself
Please spread the message of gender neutrality all over the world.
Set fire to the world with your brokenness. Sahana
Destiny favours the brave Go, Be Brave!
2 Love my Mother
OUR 1st Jaipur Lit Fest!
Be single be virgin be happy
Tanu Nonika Aisha
Quality of talking
With all the numbers of

Since 2005: softGIS

”This is a good way to map the feelings of people. You have time to think about your answers. I hope to see the results in the future.”



adding new ’soft’ layers with the help of Internet-based method into the Geographic Information System

WE DON'T REACH OUR AUDIENCES ANYMORE WITH TRADITIONAL MEANS

B X Y Z A

Baby Boomer
1946-1964

Gen X
1965-1979

Gen Y (Millenials)
1980-1994

Gen Z
1995-2010

Gen Alpha
2011 - 2025

Truly digital generation

THE WORLD TODAY IS

Digital

We use digital tools
24/7/365

80% of smartphone users check their phones within 15 minutes of waking up.
Mobile devices have changed the way we view and interact with the world.

Instant

We have access to real-time information regarding pretty much everything.

MetLife Stadium during Super Bowl

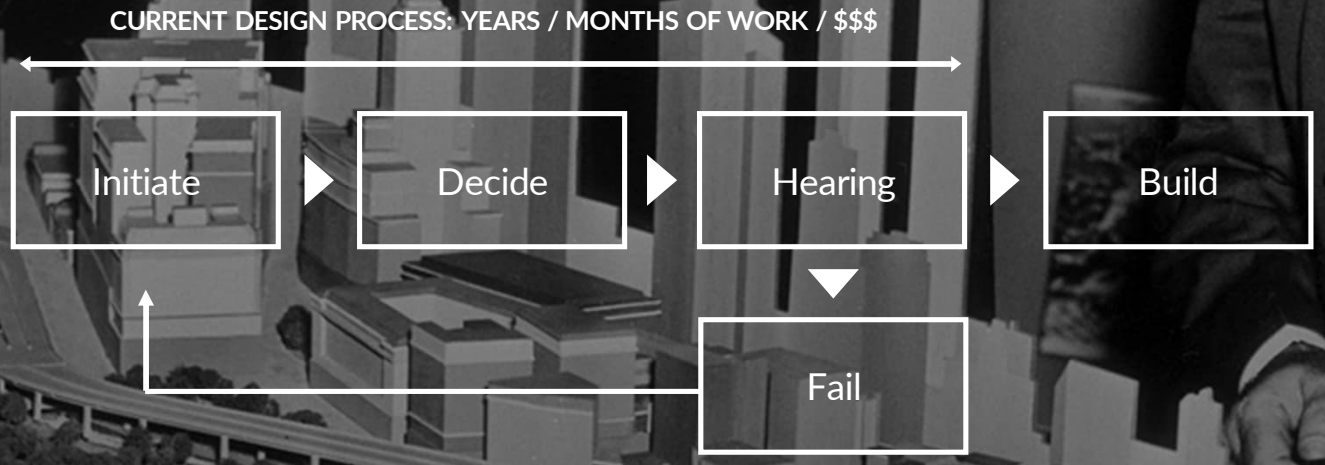
Collaborative

We can influence and voice our opinions instantly with one click.

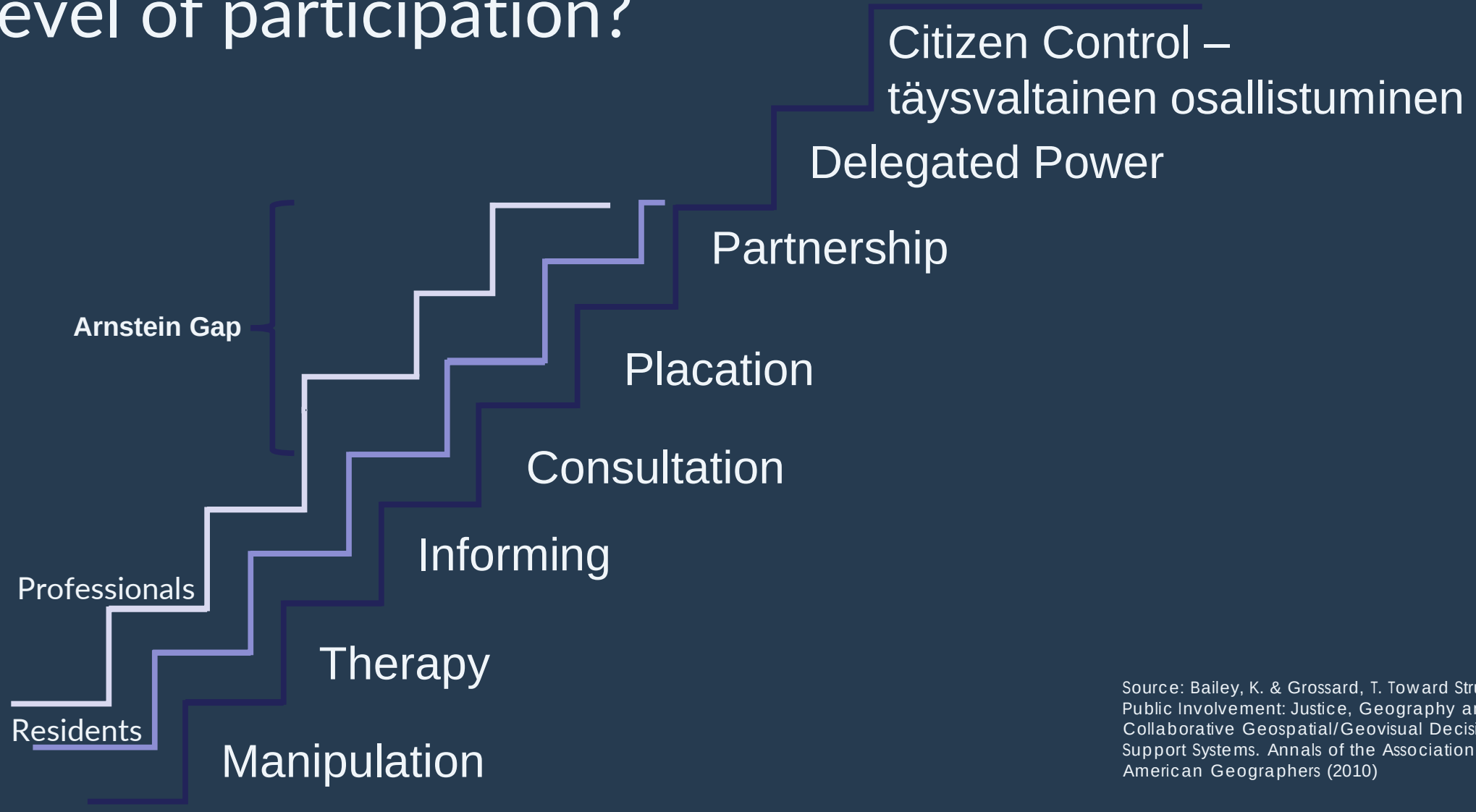
Rome, Colosseum during Earth Hour.

THOUGHTS REGARDING NEW MODEL

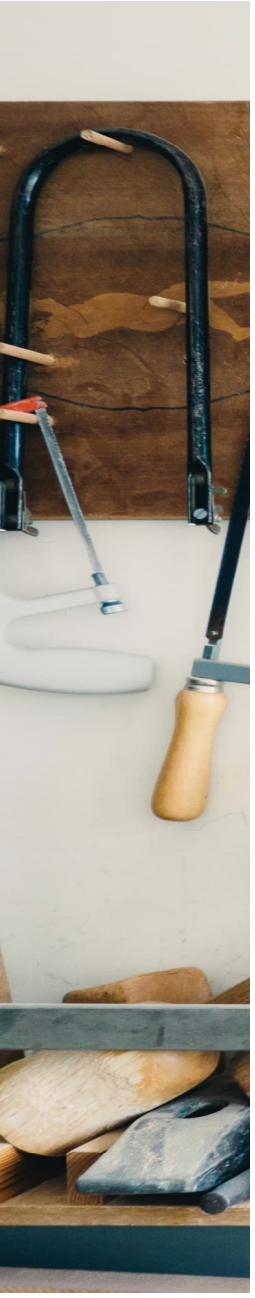
OUR CURRENT MODEL IS FAILING US



What level of participation?



Source: Bailey, K. & Grossard, T. Toward Structured Public Involvement: Justice, Geography and Collaborative Geospatial/Geovisual Decision Support Systems. Annals of the Association of American Geographers (2010)

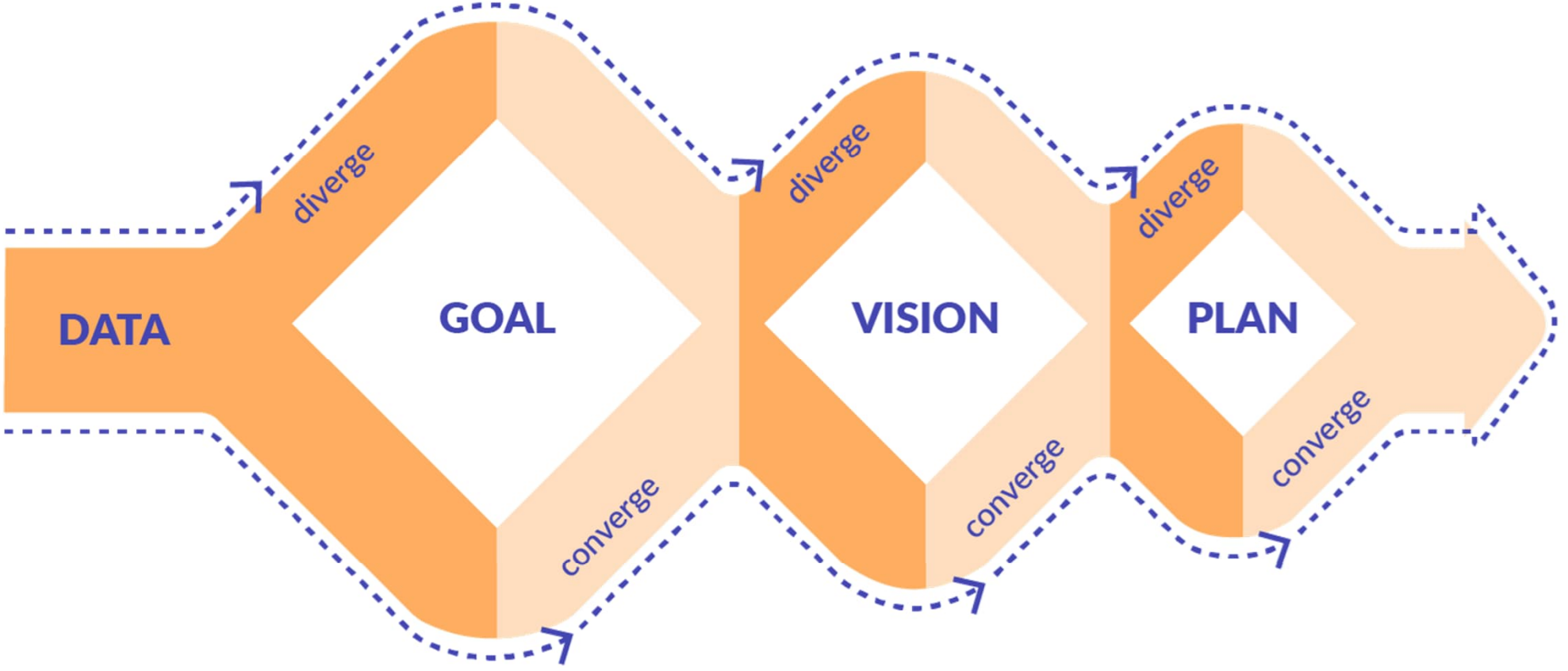


Digitalisazion creates new possibilities for using more efficient and enjoyable participation

- Social media platforms
- Gaming
- Map-based questionnaires
- Online dialogues
- Texting apps
- Videos
- Blogs
- Electronic polling
- Collaborative budgeting
- Virtual meetings

maptionnaire

THE FLOW OF COMMUNICATIVE ACTIONS IN DIFFERENT PHASES OF PLANNING PROCESS



MAPTIONNAIRE

COMMUNITY ENGAGEMENT PLATFORM

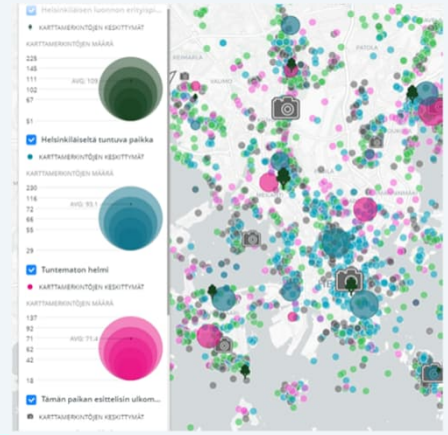
The digital heart for building cities together

Established

2011

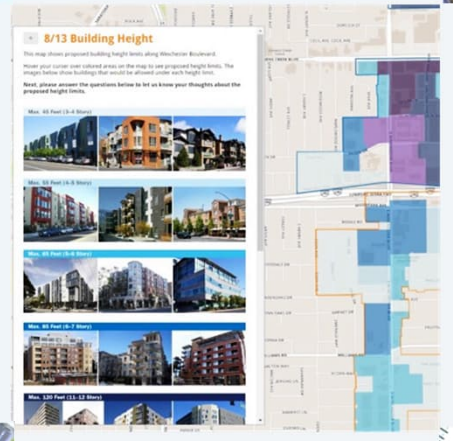
40

countries



10000+

projects

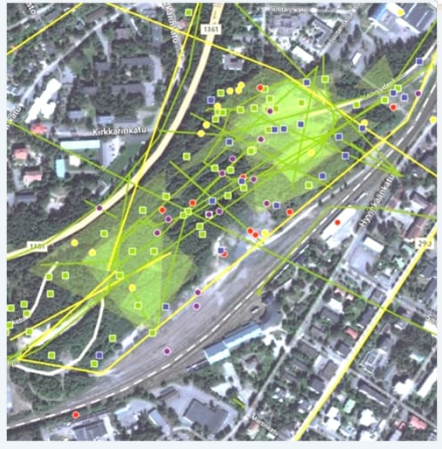


1,8 million

Map-based answers

400k+

Participants



10

million

responses

200+

Customers

MAPTIONNAIRE USE IN MASTER PLANNING

Support your communication & engagement needs throughout all stages of the master planning process with just one digital solution

PREPARATION

Collect grassroot level data from different stakeholder groups with the help of map-based questionnaires.

PROPOSAL

Present plans and drafts to citizens and **collect their opinions and comments.**

APPROVAL

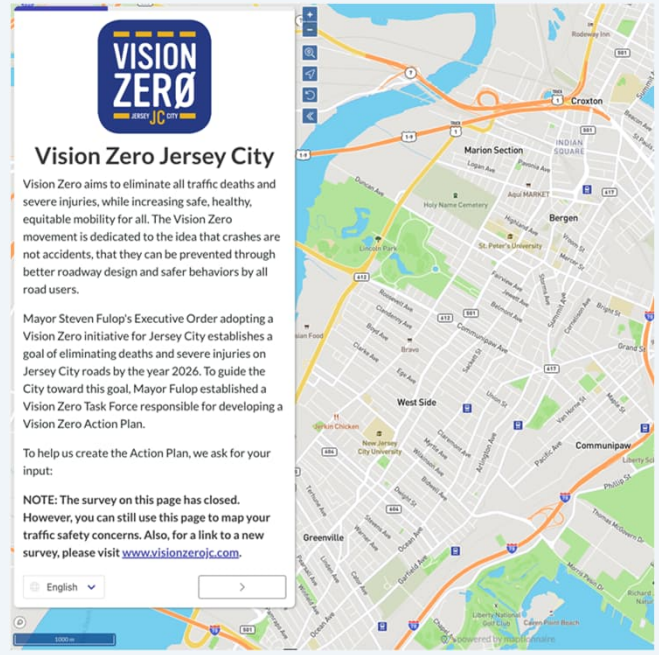
Organize a public hearing process and direct citizen comments directly to the administrative systems and specialist teams.

IMPLEMENTATION

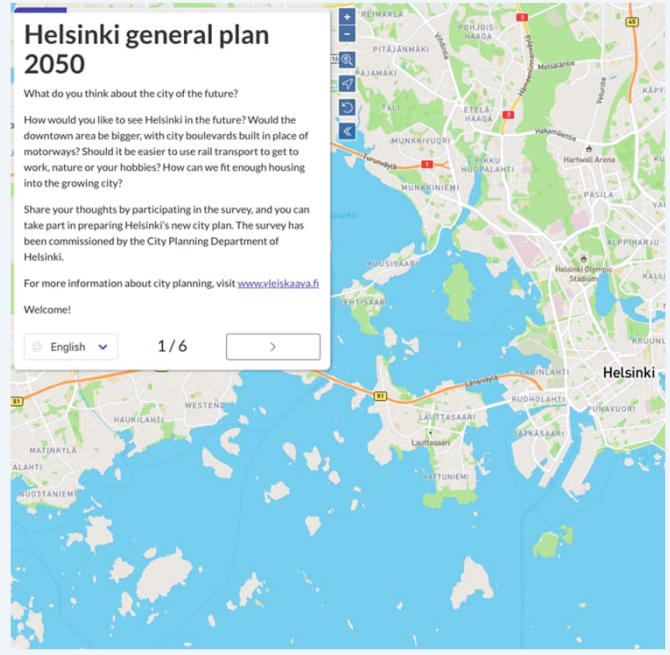
Enable project tracking and collect feedback on plan implementation via informative project websites and surveys.

PREPARATION STAGE

- **Collect grassroots data** from stakeholders and residents with map-based and traditional surveys.
- **Learn about stakeholders' and residents' experiences** of the existing environment and their needs for change.
- **Use the online tools in onsite events** and facilitate face-to-face discussions.



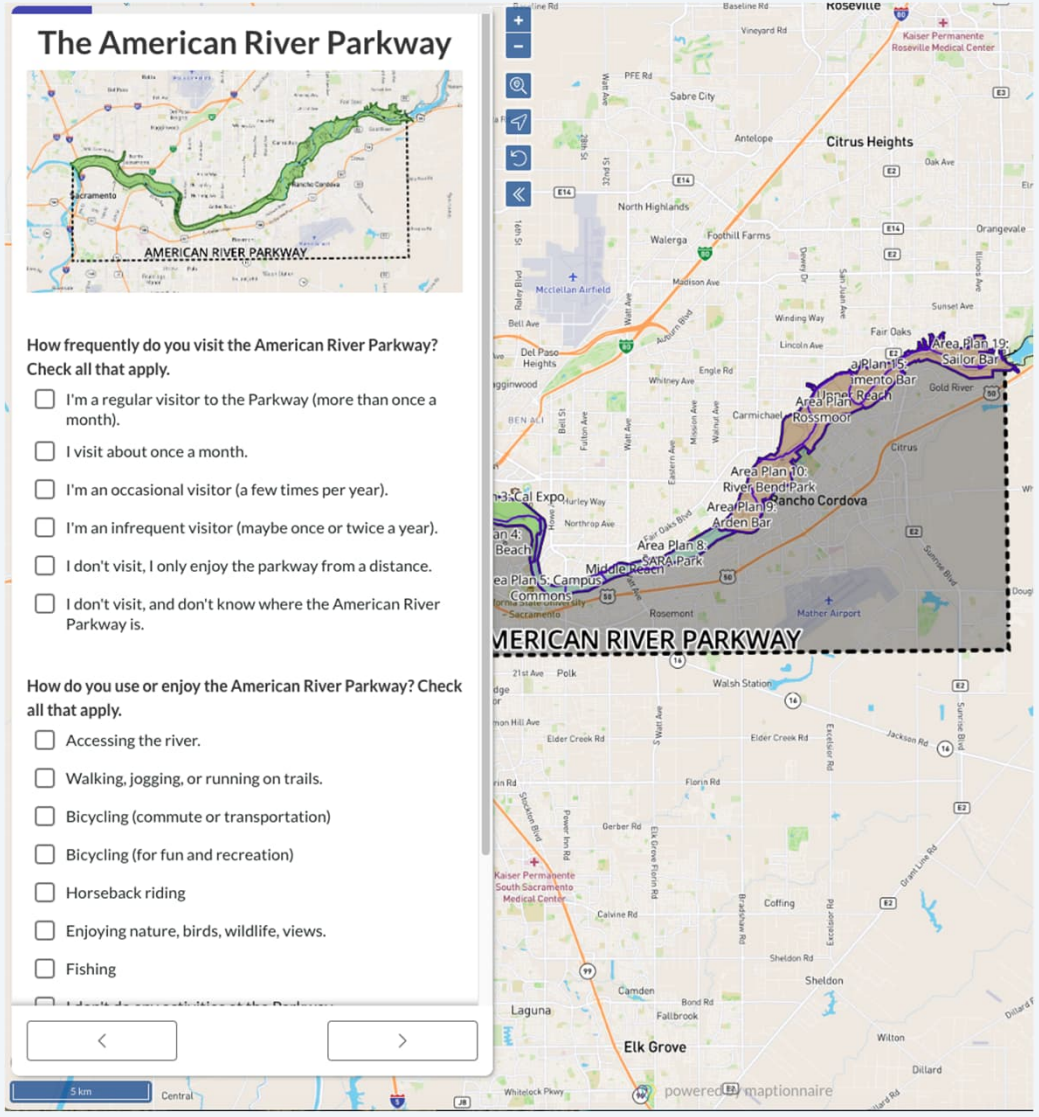
Vision Zero Jersey City



Helsinki General Plan 2050

PROPOSAL STAGE

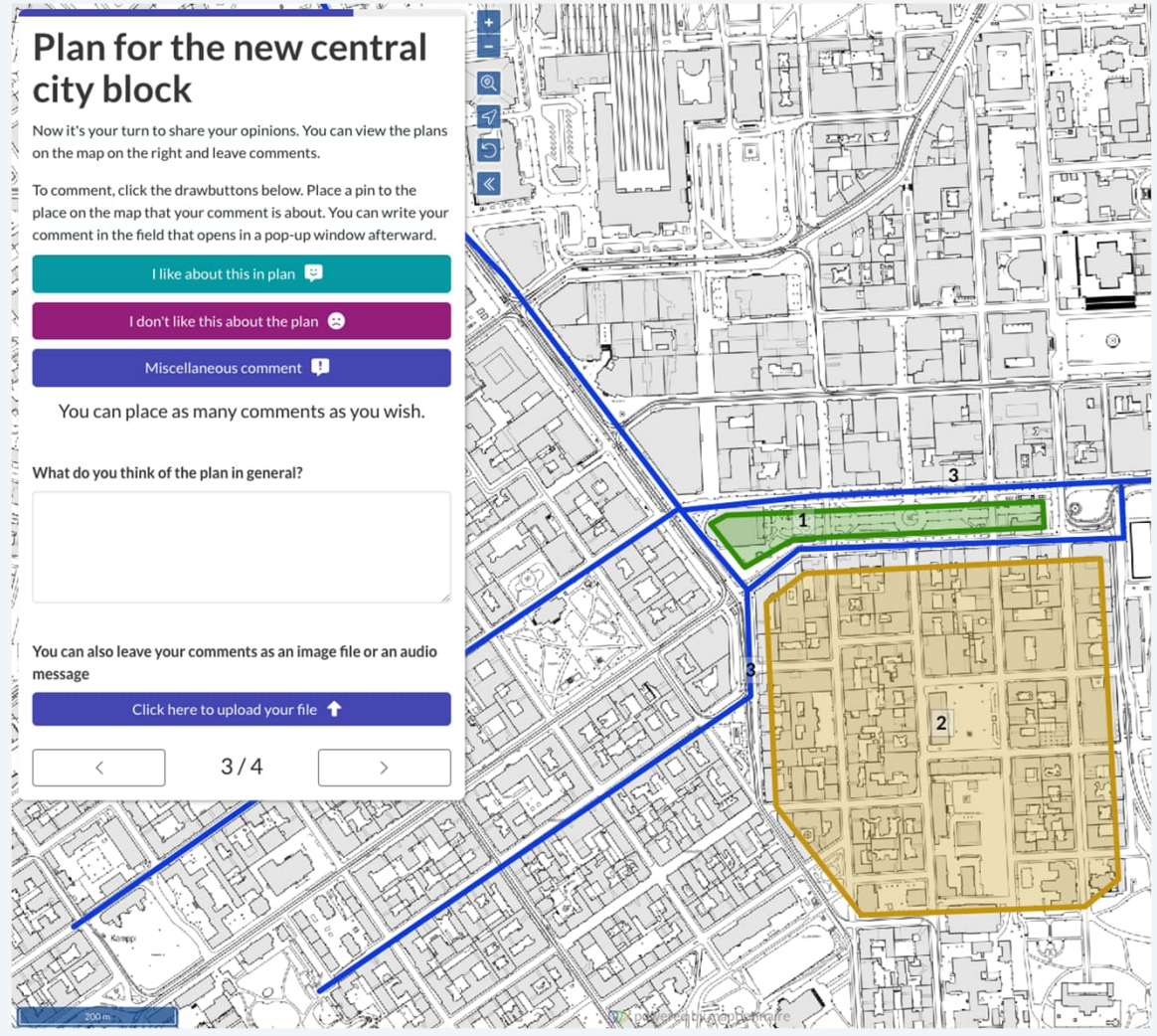
- **Organize online polls** or ask the participants to prioritize items to support decision-making.
- **Let participants evaluate** the proposal dynamically via map-based tools and point the exact locations in their comments.
- **Manage the process** swiftly and smoothly with the easy-to-use digital interface: show projects on a map, use voting tools, adjust the project's timing, and include updates and results.



Natural Resources Management Plan

APPROVAL STAGE

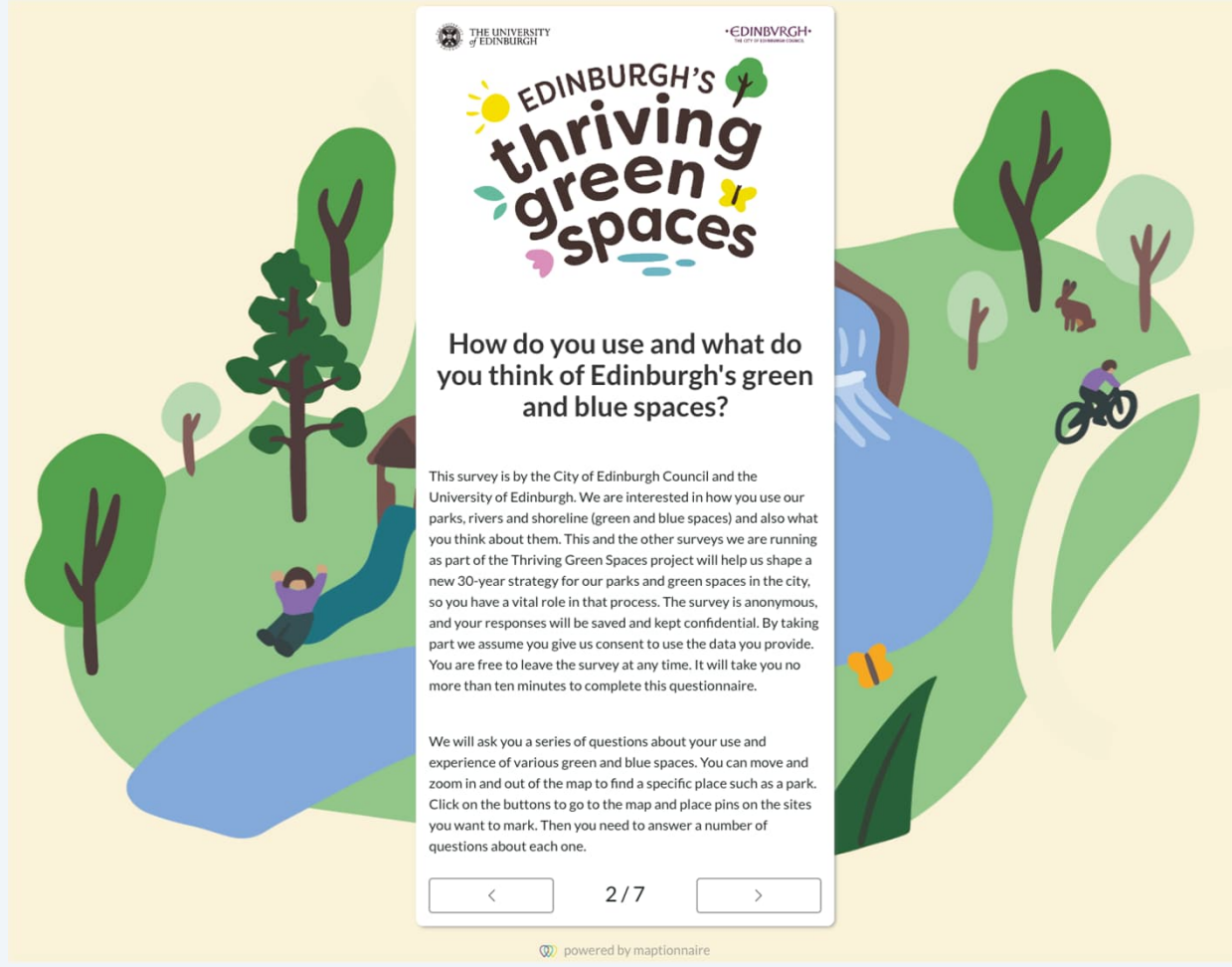
- Convert responses into standardised reports that are sent automatically to a city registry to **satisfy bureaucratic requirements**.
- **Increase transparency and trust** by making the public hearing process transparent.
- **Eliminate the need** for planners or registry workers to additionally modify, print out, or stamp public comments.
- **The acquired data is ready for analysis.**



Public Hearing: Maptionnaire Demo

IMPLEMENTATION STAGE

- **Collect feedback** about the use of recently developed spaces and services.
- **Close the feedback loop** by actively sharing the engagement results.
- **Report about the progress** and the decisions about the plan implementation.



Edinburgh's Thriving Green Spaces

PPGIS – PROS AND CONS

CRITICAL REFLECTION OF PPGIS AS A PARTICIPATORY PLANNING TOOL

203 REAL-LIFE MAPTIONNAIRE PROJECTS

Kahila-Tani, M. Kyttä, M. & Geertman, S. (2019) Does mapping improve public participation? Exploring the pros and cons of using public participation GIS in urban planning practices. *Landscape and Urban Planning,* 186, 45-55.

EXTENSIVE PARTICIPATION

PROS

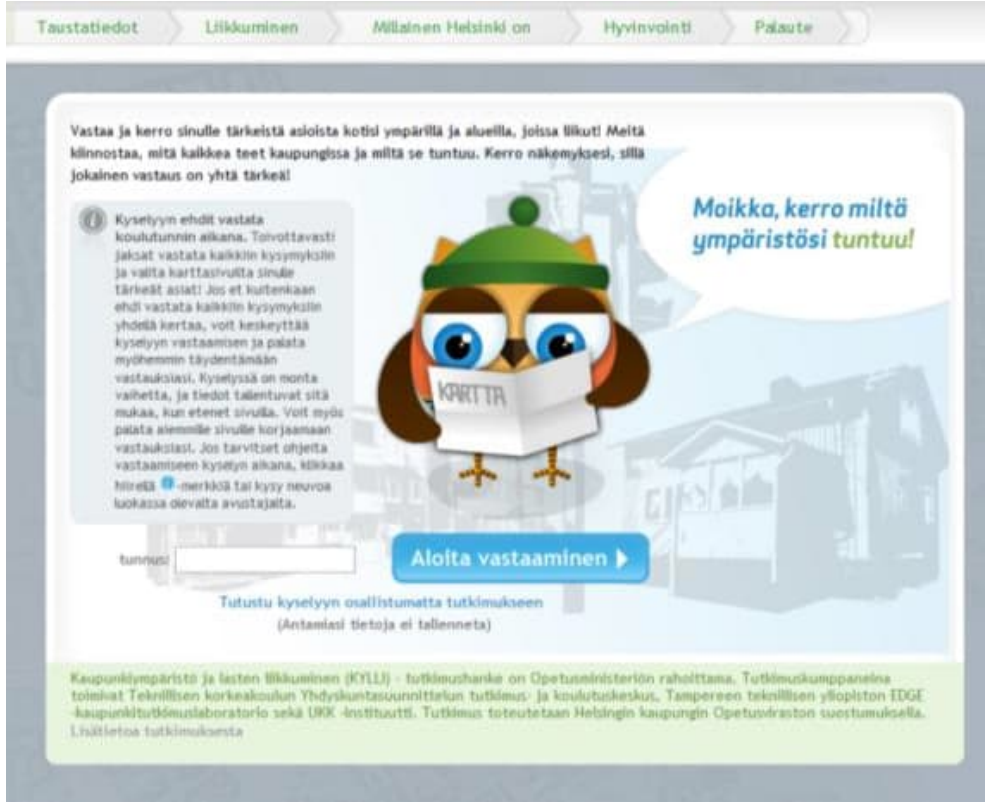
- Relatively high number of participants can be reached with reasonable effort
- Reaching new resident groups
- Fostering individual participation

CONS

- Digital divide
- Data manipulation
- Challenges related to data collection strategies
- Technology stress & information overflow

A REVIEW OF
OVER 200 SURVEYS:
467
RESPONDENTS ON
AVERAGE

INCLUSIVENESS: New resident groups can be reached

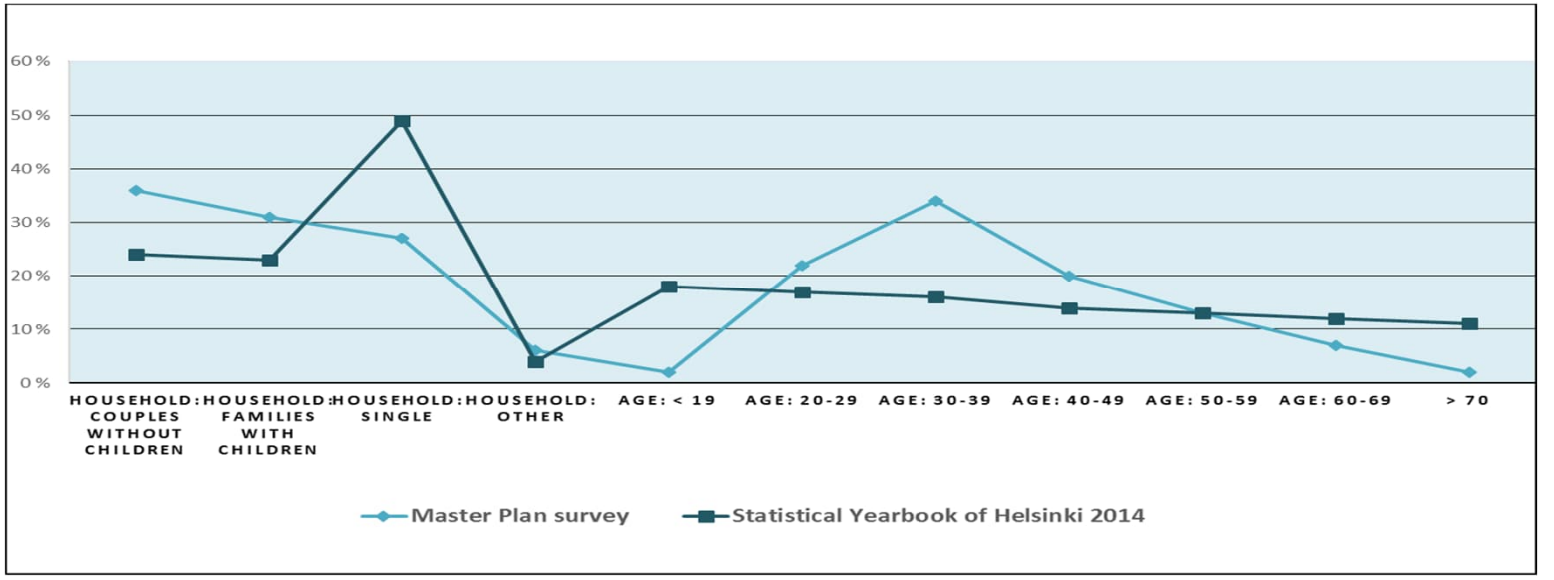


PPGIS FOSTERS INDIVIDUAL PARTICIPATION

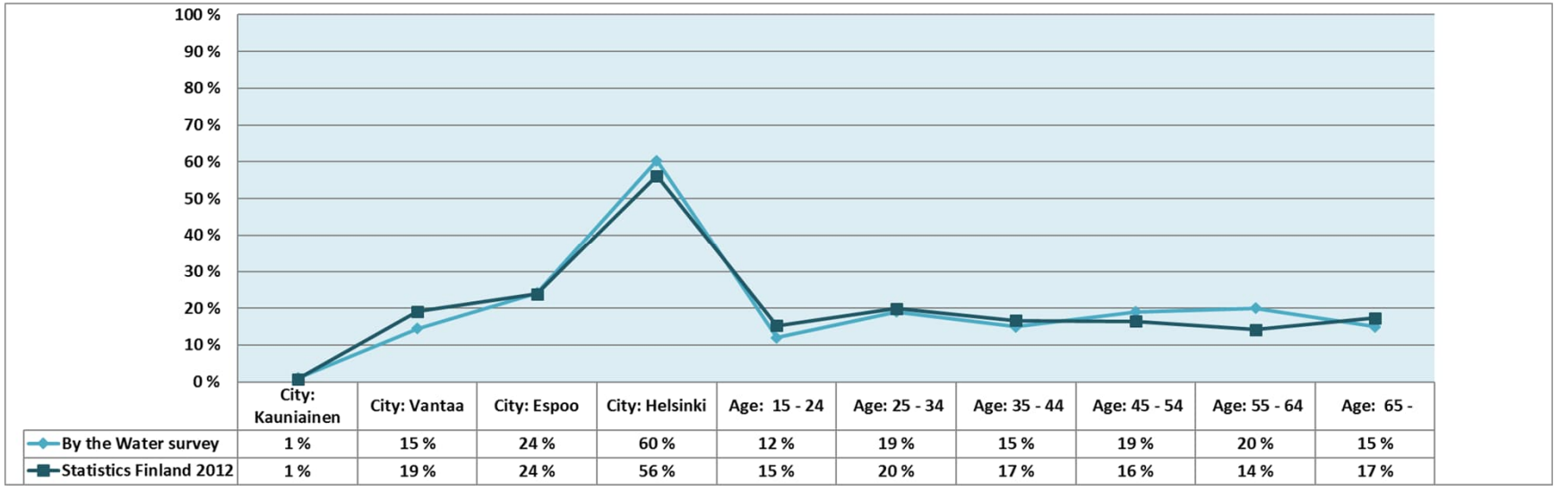
	Individual participation	Collective participation
Diversity of opinion	Each person should have the opportunity to share their private information	The private information of different persons' is filtered through groups aims
Independence	Peoples' opinions are not determined by those around them	Peoples' opinions form part of the joint understanding of the group
Decentralisation	People are able to specialize and draw on local knowledge	Combines and acknowledges local knowledge from different sources
Aggregation	Some mechanisms exist for turning private judgements into public judgement	Effective mechanisms for turning private judgements into public judgement

Kahila-Tani, M. (2016) *Reshaping the planning process using local experiences: Utilising PPGIS in participatory urban planning*. Aalto University publication series, 223.

HOW ABOUT REPRESENTATIVENESS?



Case
Helsinki Master Plan



	City: Kauniainen	City: Vantaa	City: Espoo	City: Helsinki	Age: 15 - 24	Age: 25 - 34	Age: 35 - 44	Age: 45 - 54	Age: 55 - 64	Age: 65 -
By the Water survey	1 %	15 %	24 %	60 %	12 %	19 %	15 %	19 %	20 %	15 %
Statistics Finland 2012	1 %	19 %	24 %	56 %	15 %	20 %	17 %	16 %	14 %	17 %

Case
By the water survey

DIGITAL DIVIDE AND TECHNOLOGY STRESS

Gottwald, S. Laatikainen, T. Kyttä, M. (2016) Exploring the usability of PPGIS among older adults: challenges and opportunities. International Journal of Geographical Information Science, 1-18.

HIGH QUALITY, VERSATILE AND USABLE KNOWLEDGE

PROS

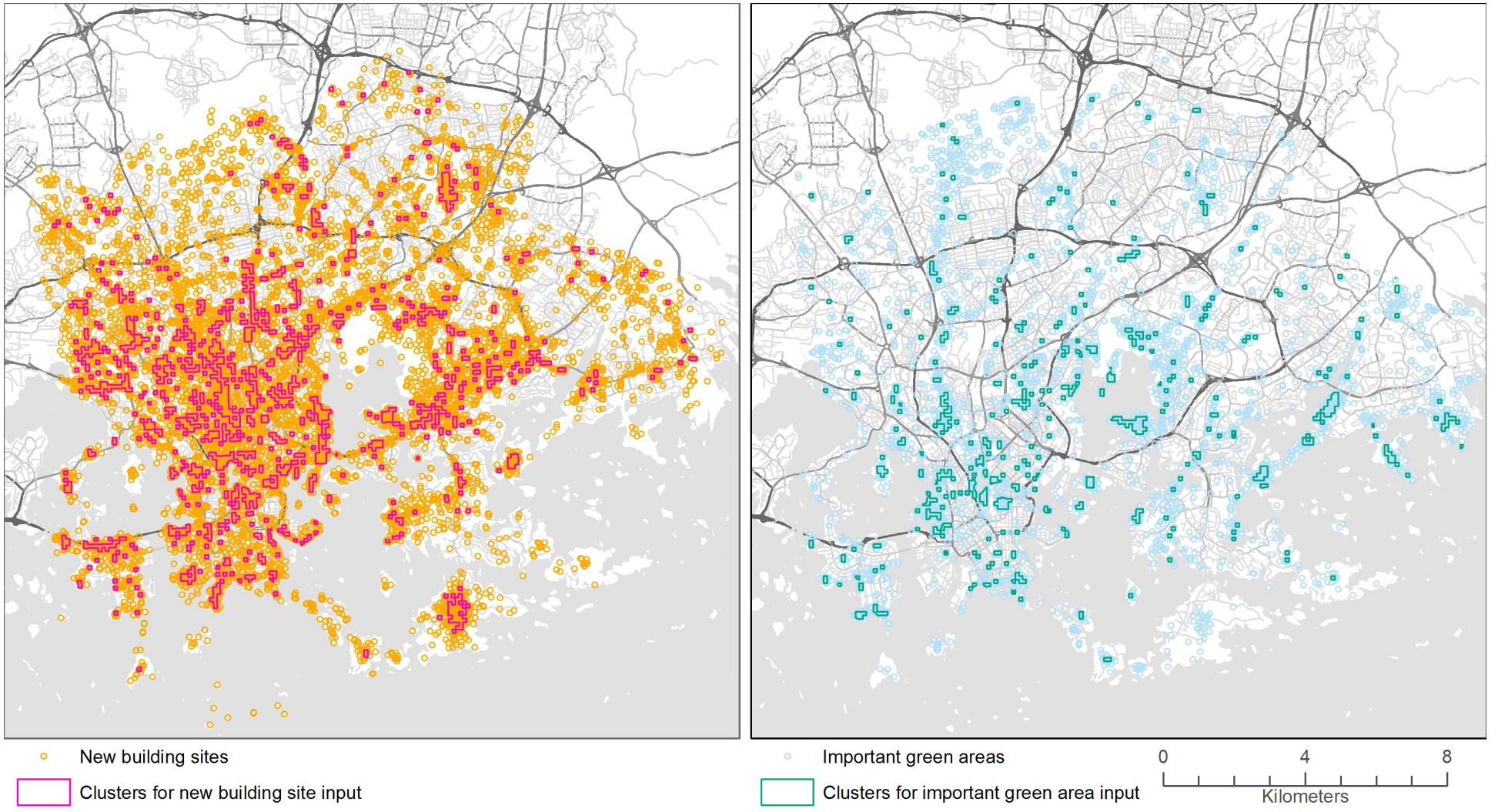
- Localized information related to planning situations
- Allow the collection of positive feedback
- Place-based data can be integrated to existing systems

CONS

- Potential of cherry picking - misuse of data to support e.g. the existing presumptions
- Potentially lack of transparency
- Frustration of participants if nothing changes

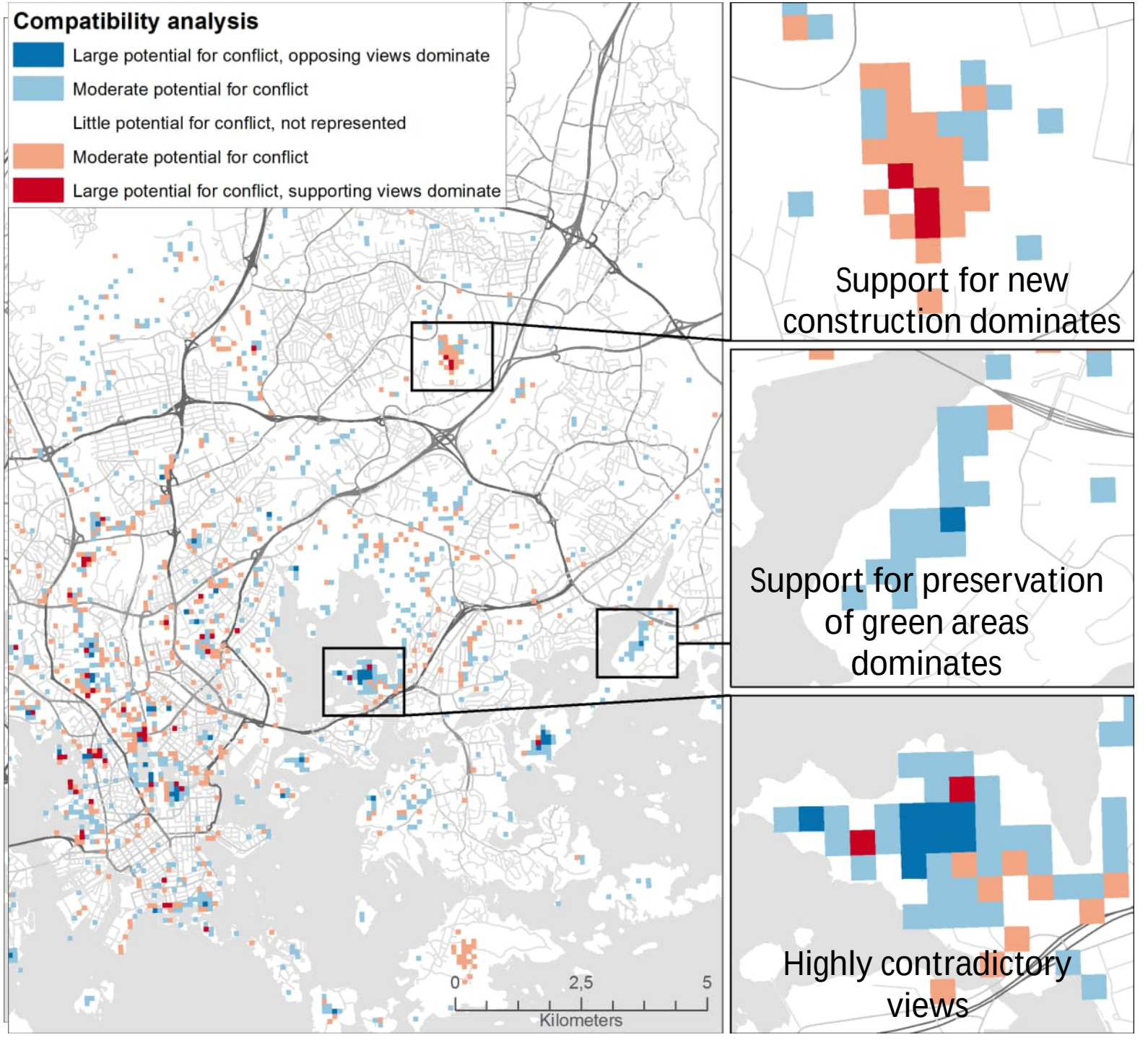
NEW TYPE OF KNOWLEDGE IN A VISIBLE FORMAT

Case Helsinki Master plan: Locations of the new building sites & green areas that should be protected



REVEALES RESIDENTS' CONFLICTING VIEWPOINTS OF THE PLANNING TOPIC

Case
Helsinki Master Plan:
Compatibility-analysis



CHERRY PICKING – Idea competition winner in Vaasa: Mansikka ja Variksenjalka

EFFECTIVE PRACTICES OF PUBLIC PARTICIPATION

PROS

- Easy to implement
- Data collection in various geographic scales
- Usable in various phases and planning situations
- Systematic data collection reduces unnecessary data collection

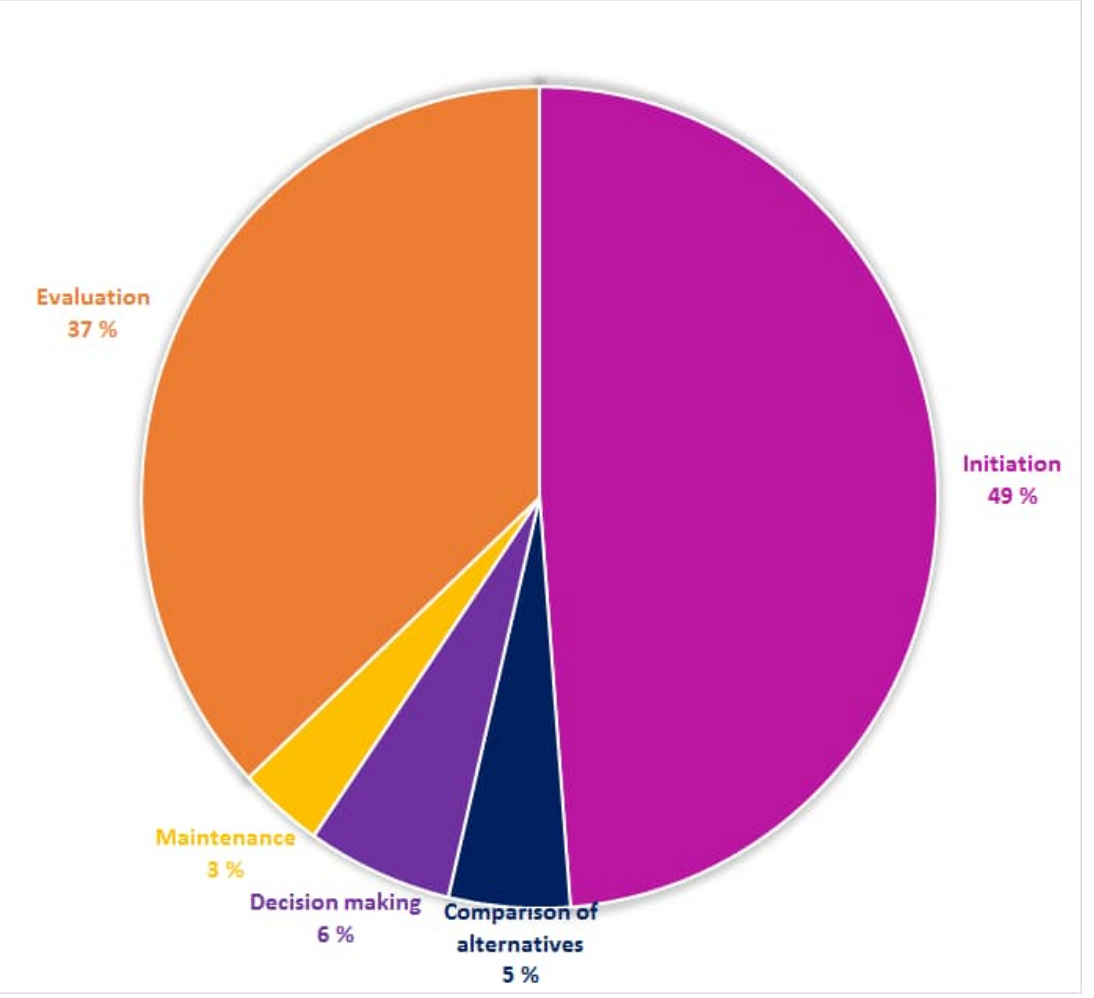
CONS

- Leads easily to the continuation of top-down participation
- Can take the form of non-meaningful participation
- Lack of economic resources, skills, interests etc., can prevent use of digital methods
- Digital methods alone are seldom sufficient

IN WHICH PHASES OF THE PLANNING PROCESS?

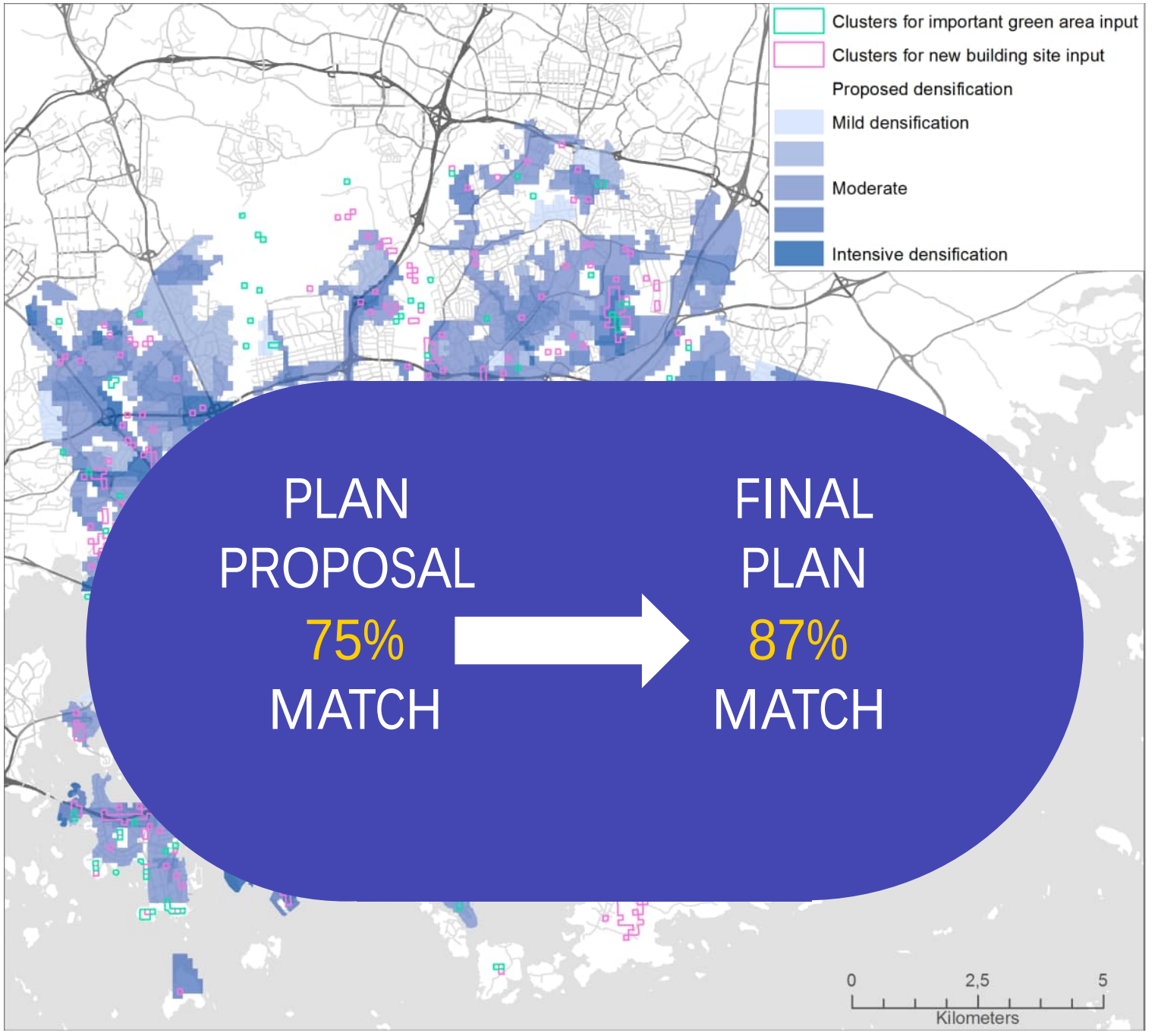
Real life planning cases 2013-2017, n= 203

- Initiation
- Comparison of alternatives
- Decision making
- Maintenance
- Evaluation



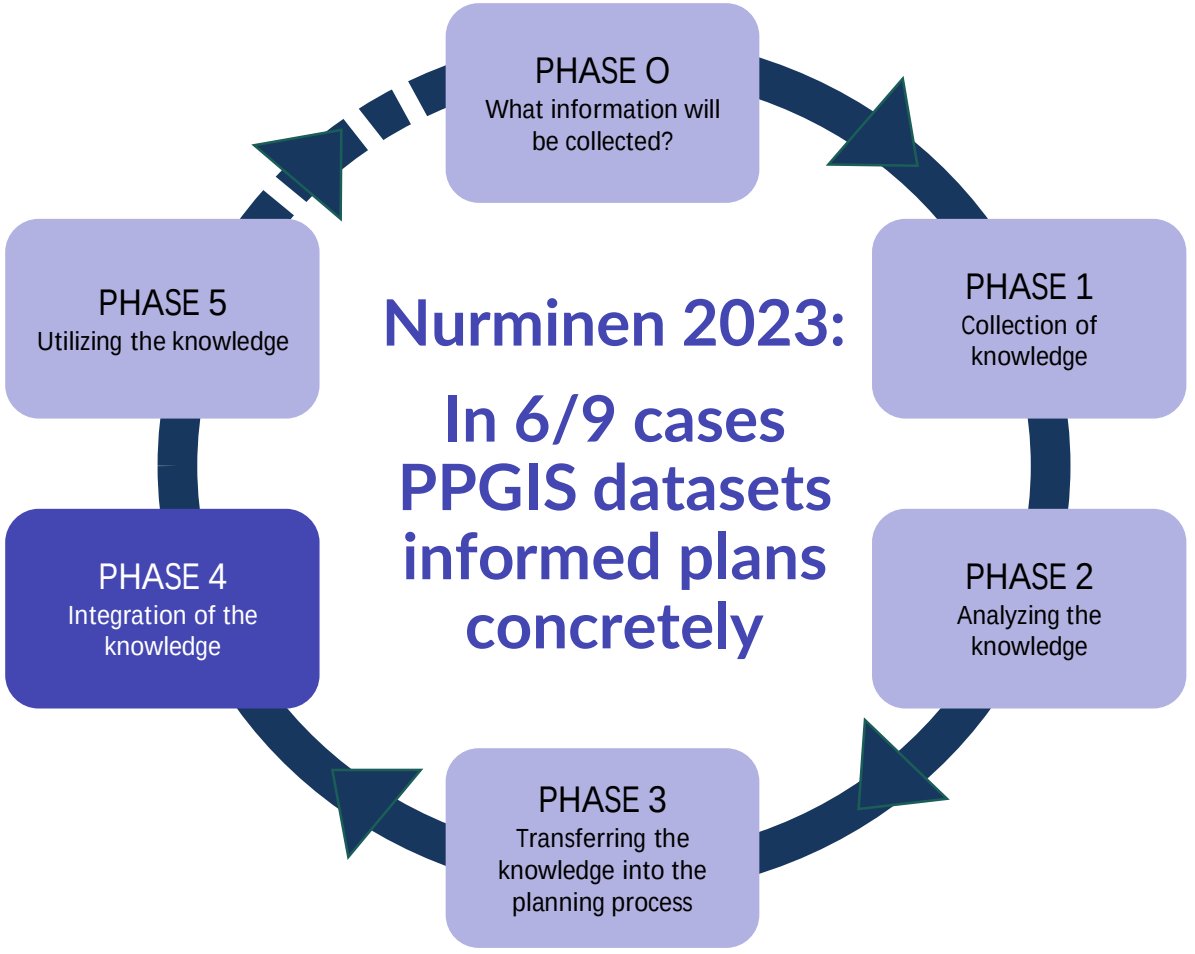
MORE INFLUENTIAL PARTICIPATION?

The comparison between participants' views and the Helsinki Master Plan proposal



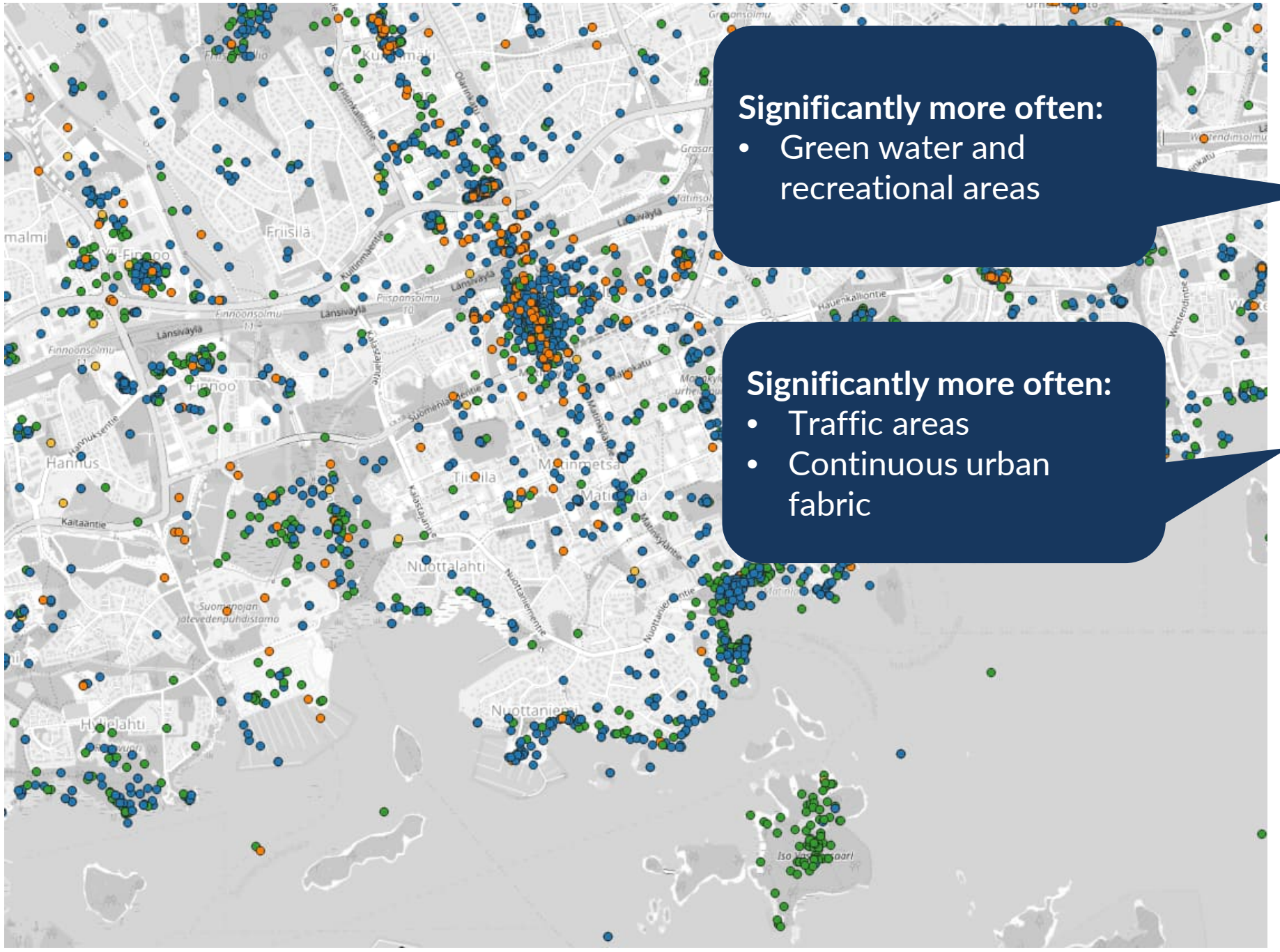
Kahila, M. Broberg, A. Kyttä, M. & Tyger, T. (2016) Let the citizens map - Public participation GIS as a planning support system in Helsinki 2050 master planning process. *Planning practice and research*, 31, 2, p. 195-214.

RECENT STUDY ABOUT 9 URBAN PLANNING CASES IN FINLAND



NOW: DEVELOPMENT PRIORITIZATION MODEL

Case: City of Espoo



Maintenance strategy

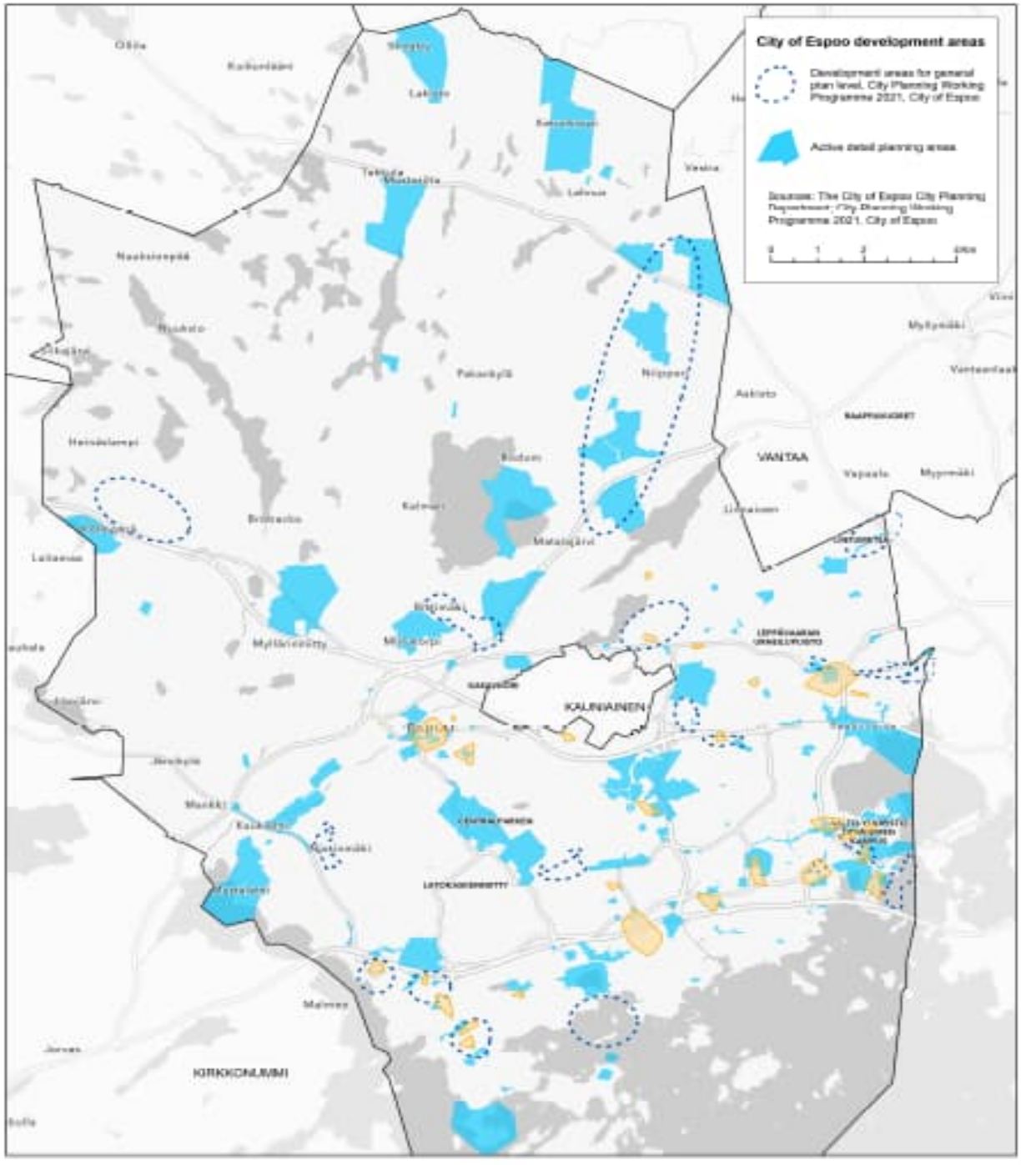
Protection priority

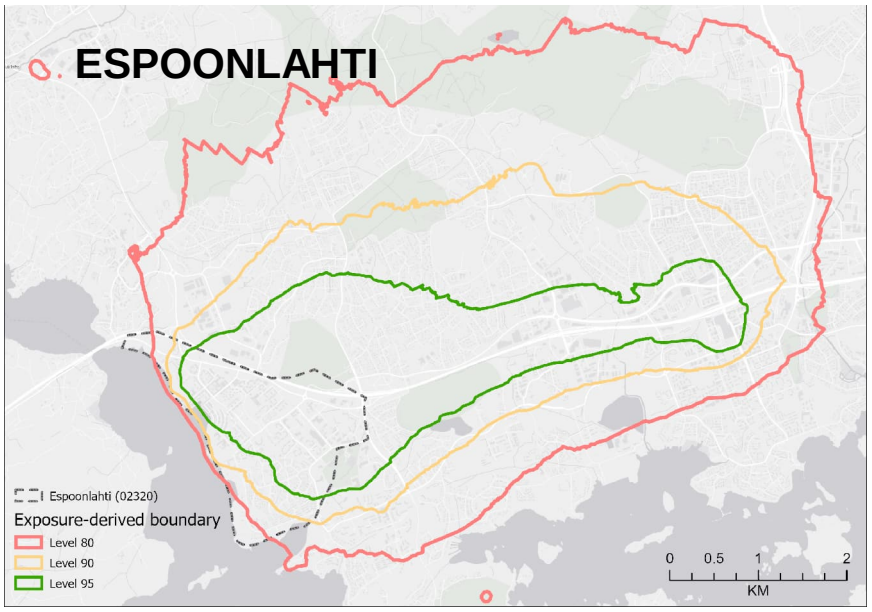
Development priority

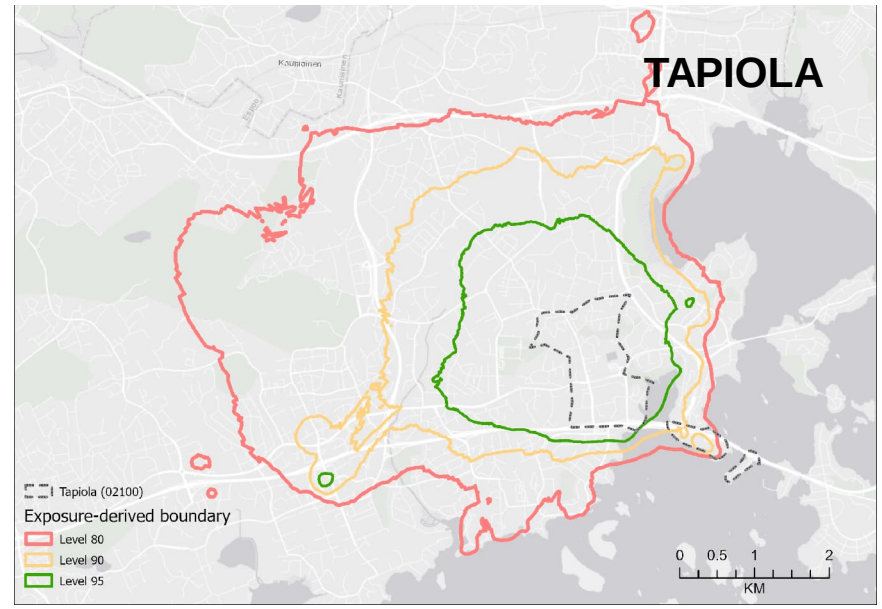
Development potential

PLANNING PERSPECTIVE

Comparison between
***Development priority* clusters and**
existing active planning areas of the city of Espoo



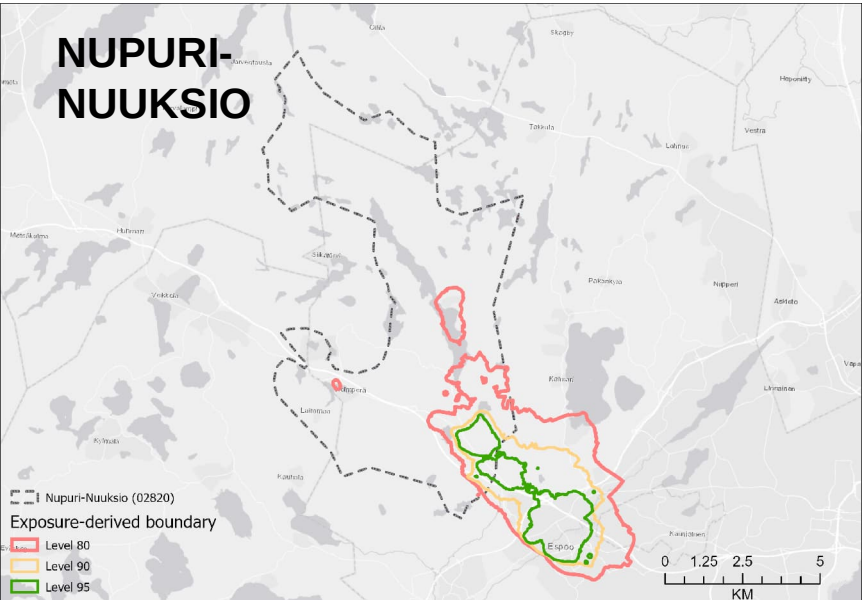


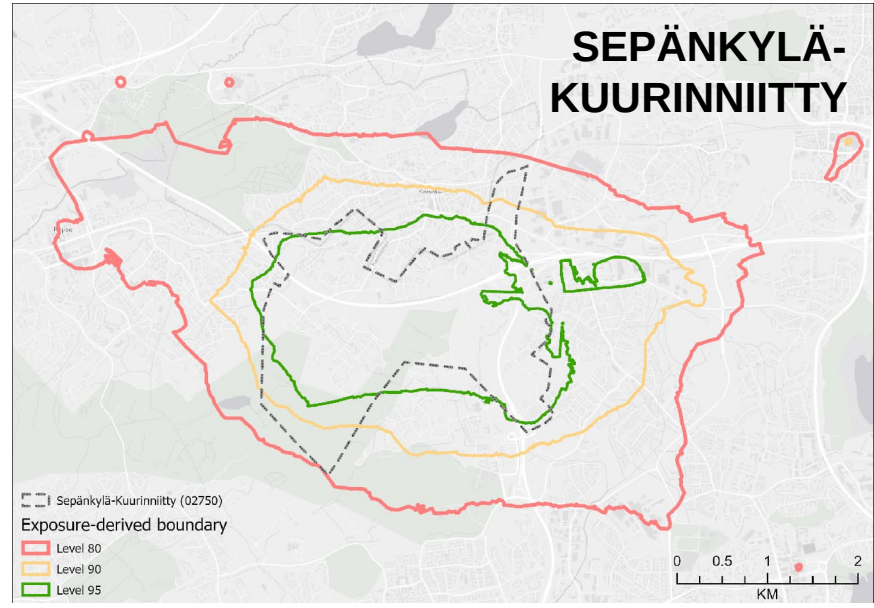


REDEFINITION OF NEIHGBOURHOOD BOUNDARIES

based on individual activity spaces

(KAMYAR HASANZADEH 2023)





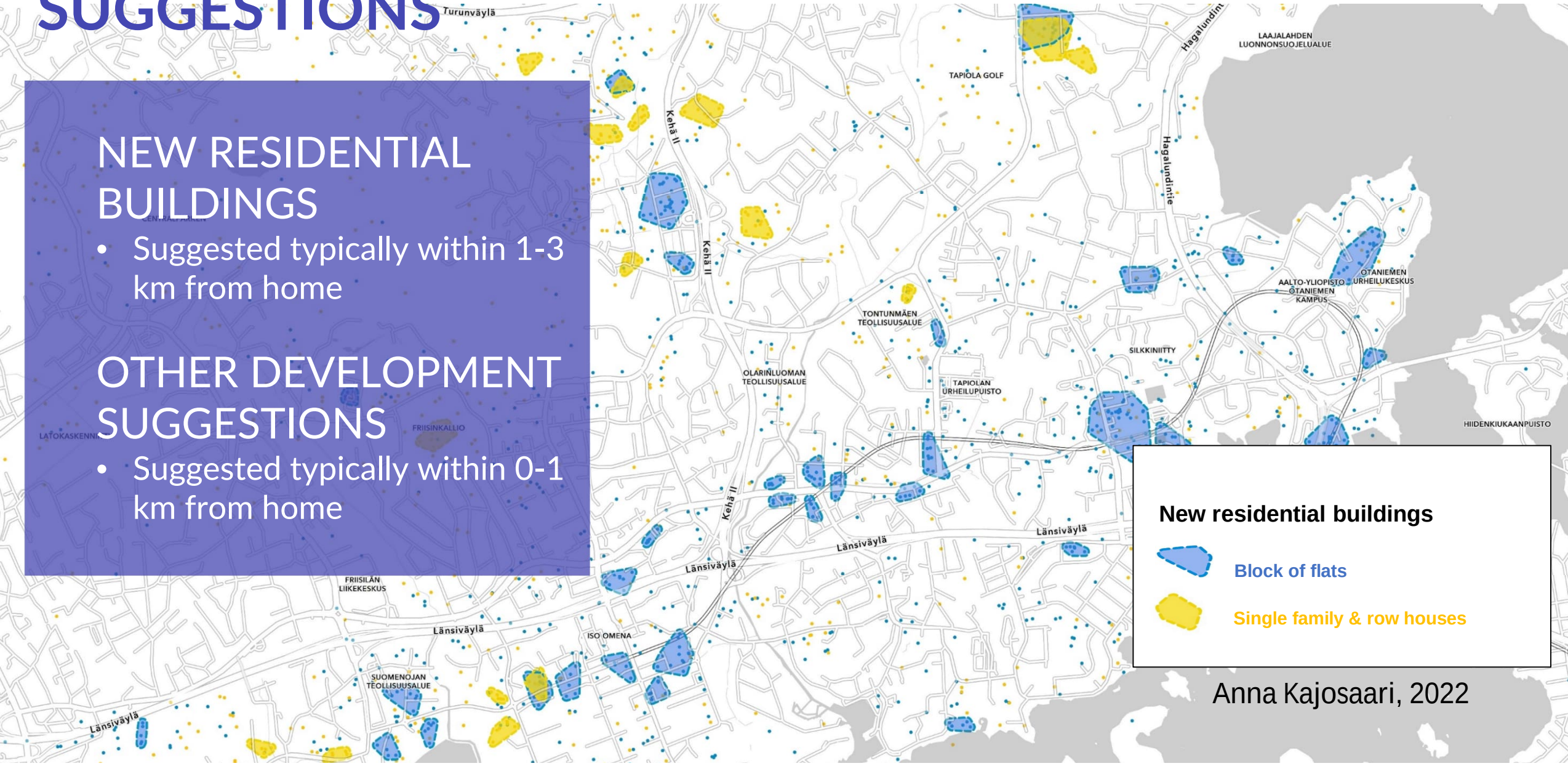
LOCATIONS FOR NEW INFILL & IMPROVEMENT SUGGESTIONS

NEW RESIDENTIAL BUILDINGS

- Suggested typically within 1-3 km from home

OTHER DEVELOPMENT SUGGESTIONS

- Suggested typically within 0-1 km from home



Anna Kajosaari, 2022

PLACE-BASED DATA FROM PEOPLE CAN BE INTEGRATED TO EXISTING SYSTEMS

Case: City of Lahti, Finland

MEANINGFUL PARTICIPATION – avoid playing with the participants

The biggest advantage so far has been the 'image' benefit of implementing this kind of survey. To be able to use the content of the survey we have to deepen the analysis."
(Case Helsinki: Planner)

… PPGIS can be used as a therapeutic participatory device

Where next?

3D Collaboration

- Broad use cases – collect feedback with 3-dimensional models for both buildings & their surrounding environments
- Achieve clarity – help citizens understand what a complex development project will really look like
- Improve interactions – create a shared language between experts

3D Collaboration – Use Case City of Turku, Aninkainen

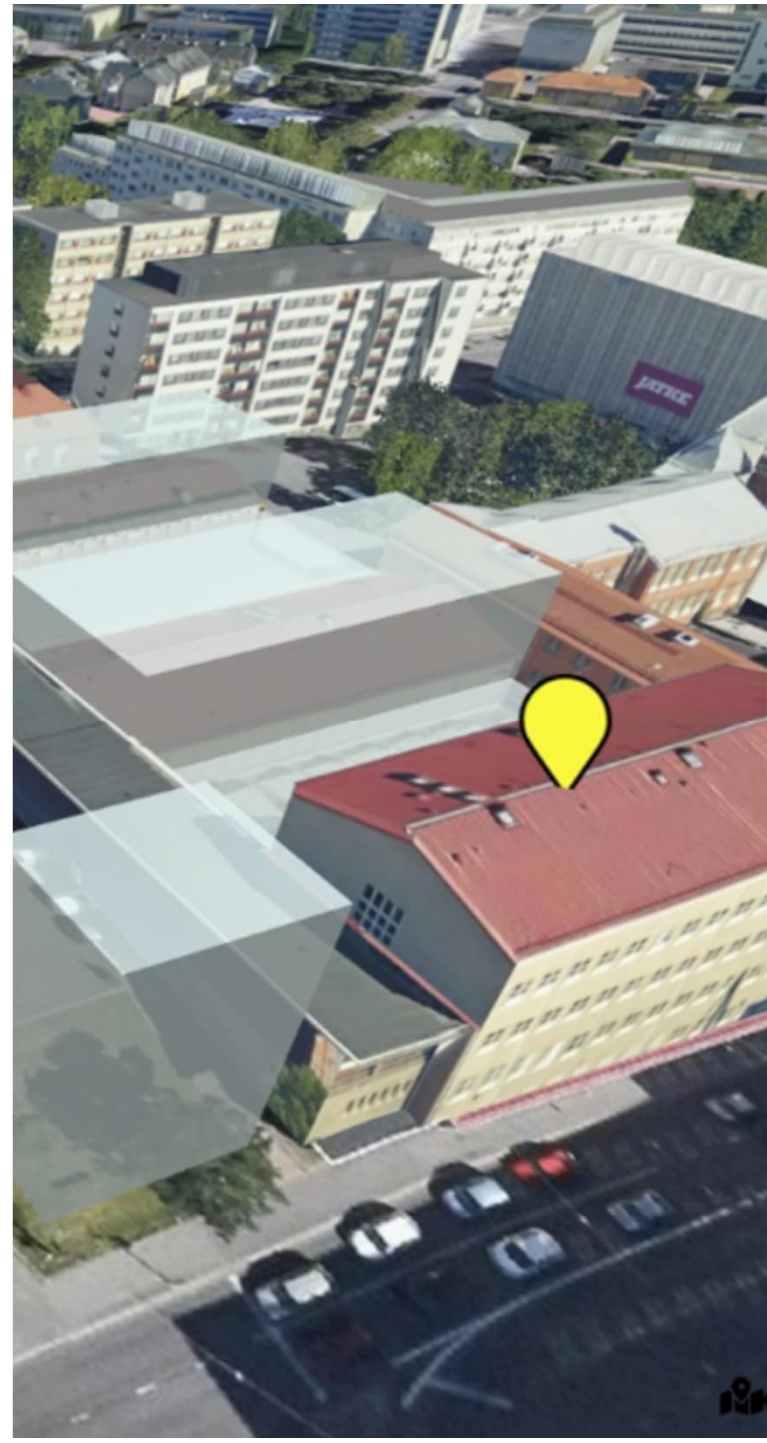
Study was linked to an on-going planning process in one specific city block, Aninkainen. The aim of the survey was to increase knowledge of this specific part of the city and collect ideas for its future development.

In the survey, the respondent could read about the history and view photographs of the area, have a predetermined 3D fly-through around the area, navigate and click on information boxes in the 3D view, place future ideas on it using map markers, and describe the ideas in words.

Outcomes:

- 126 respondents with nearly equal gender distribution and most common age between 30-64 years
- Usability challenges faced by smartphone users
- Challenges: slow rendering of the 3D view, task of mapping ideas using place markers, and navigating on the 3D view.
- Those who had the skills and proper device to respond to the survey, found the experience very positive – no one said they wouldn't recommend the tool further.
- Planners experienced that the pilot gave them valuable insights on how it can be used with citizens.

Project team: City of Turku, University of Turku/GreenPlace, Sova 3D, Maptionnaire



Participatory budgeting projects are popular among citizens, but can take up a lot of resources to organize

Maptionnaire offers a flexible solution developed from the organizer's perspective

Create a project webpage

- Inform
- Summarize
- Discuss

Collect ideas from citizens

- Split ideas with potential for more than one proposal
- Merge similar ideas

Refine ideas into realistic proposals

- Create and edit the content of proposals
- Show the ideas that were the basis for the proposal

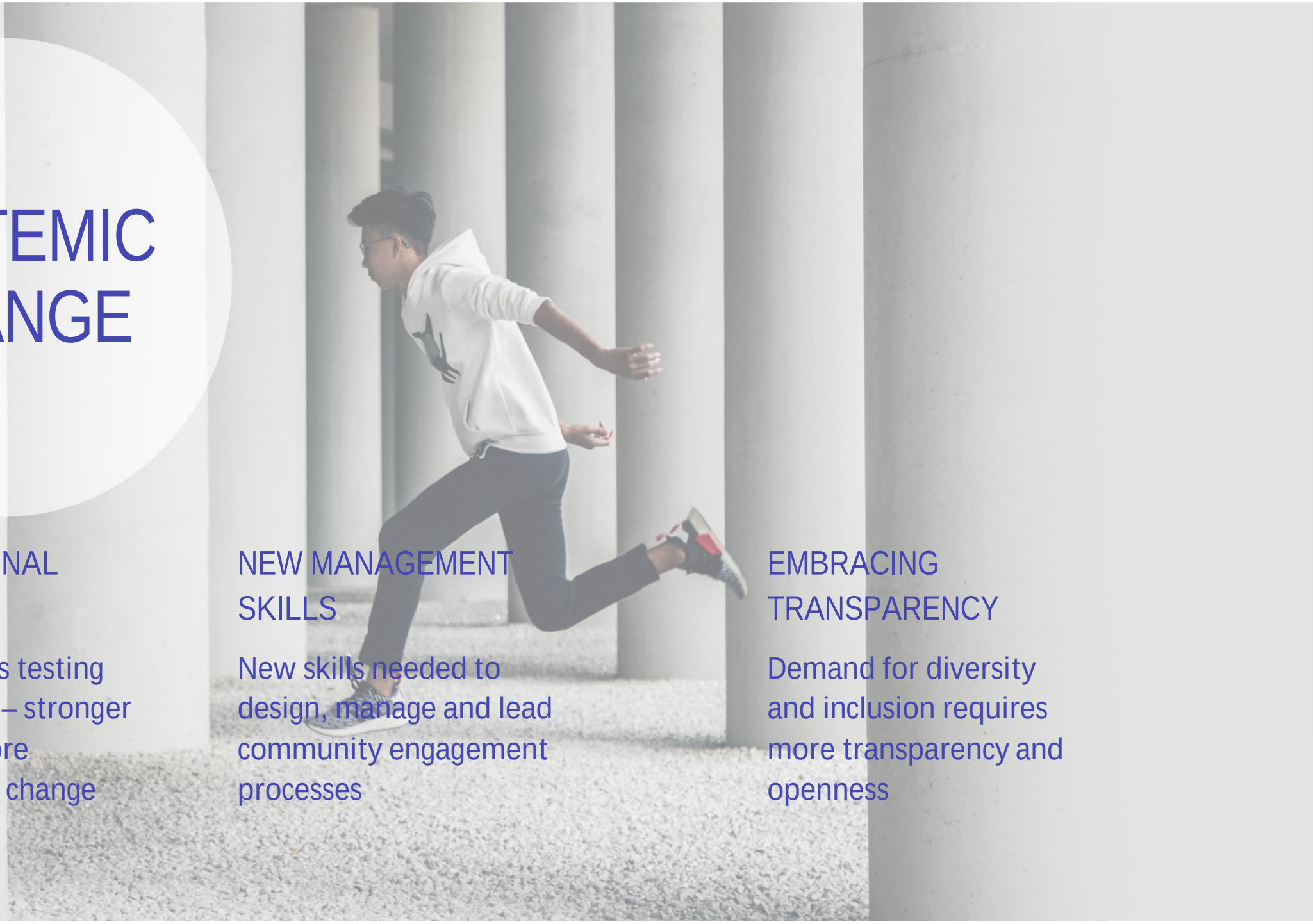
Start the vote

- Registering to vote is easy
- Citizens can keep up on the number of votes in real time

Share the results

- Citizens can follow the progress of winning proposals into realized projects

SYSTEMIC CHANGE



ORGANISATIONAL CHANGES

Fatigue towards testing and innovating – stronger pressure on more comprehensive change

NEW MANAGEMENT SKILLS

New skills needed to design, manage and lead community engagement processes

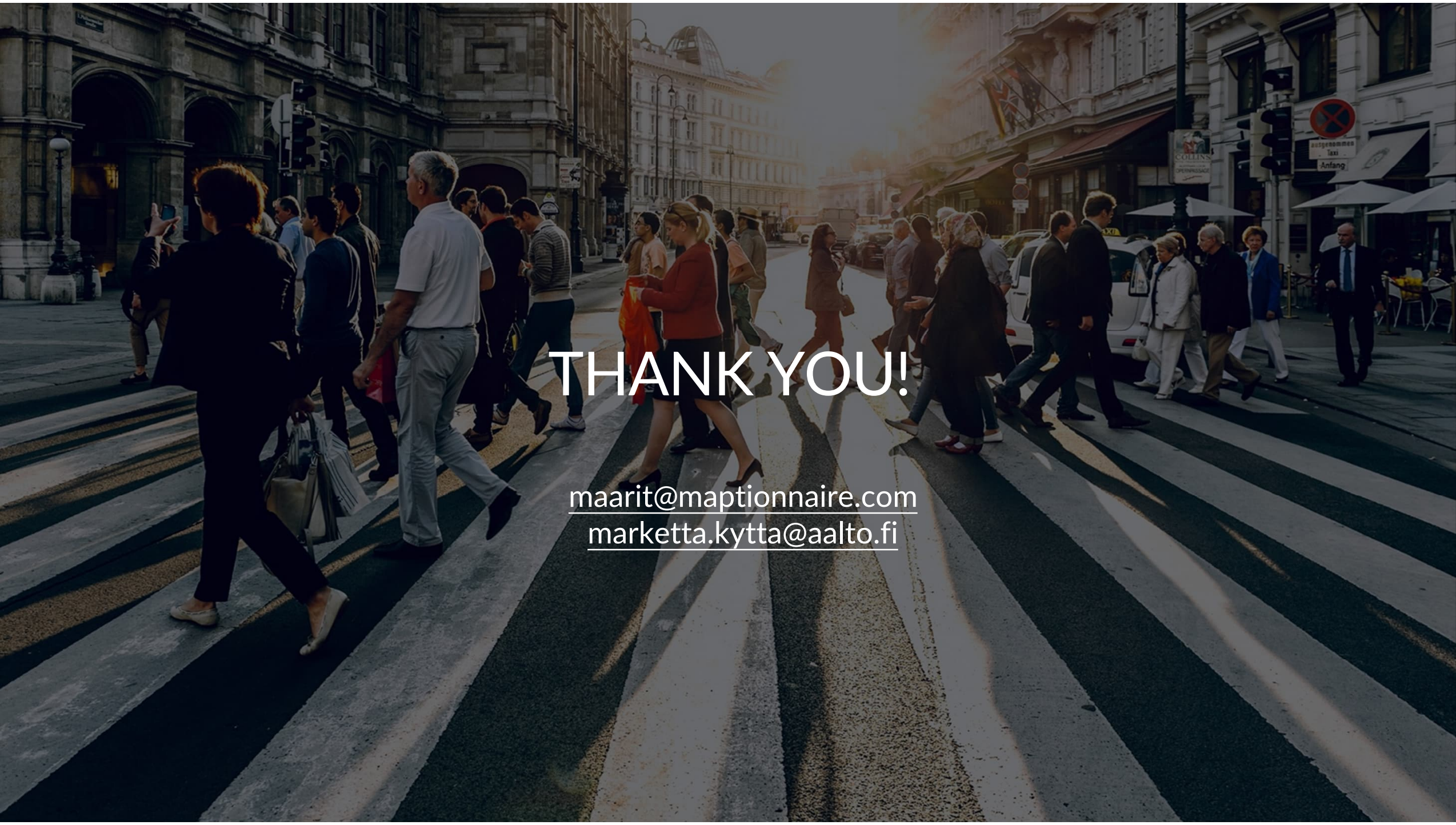
EMBRACING TRANSPARENCY

Demand for diversity and inclusion requires more transparency and openness

“The goal is for the citizen to see the connection and continuity of participation, planning and development work.”

Digitalizing Community Engagement with Maptionnaire Case study: City of Vantaa

- Though community engagement means face-to-face and online methods, online participation is playing an increasingly important role.
- Aim to get rid of the siloed thinking - almost all the departments in Vantaa have already started using Maptionnaire (e.g. urban planning, urban culture, day care and education, healthcare and social services).
- The aim is to harmonize the procedures of community engagement by enabling communication under the same umbrella.
- Vantaa has designed a main user model: each department has designated Maptionnaire users who help with implementing the service. They identify opportunities of how the service could be used within the department but also within the entire city.
- Easier to document the information and data gathered from different surveys. In the future, historical data will also be easily available for the entire city to utilize.



THANK YOU!

maarit@maptionnaire.com
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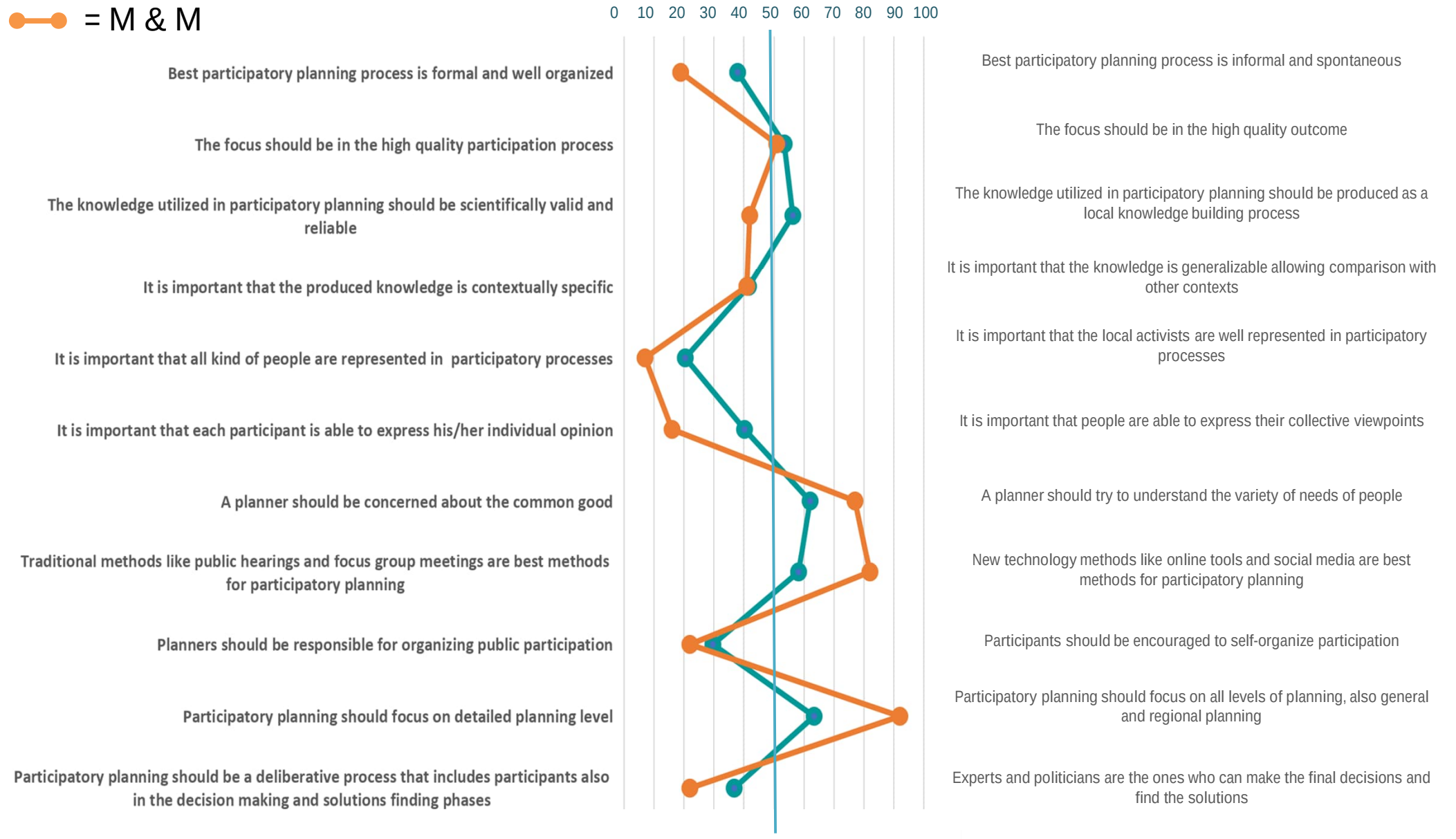
Now: Discussion led by opponents

	Theme:	Lecturer(s)
6.3.	Does mapping improve public participation?	Maarit Kahila-Tani Marketta Kyttä
	Opponents:	
	Aku Staff, Larissa Hollub, Nicolette Slagle, Nadezhda Zubova, Katharina Reusteck, Amelia Cardwell	

Teachers attitudes towards public participation vs those of the students

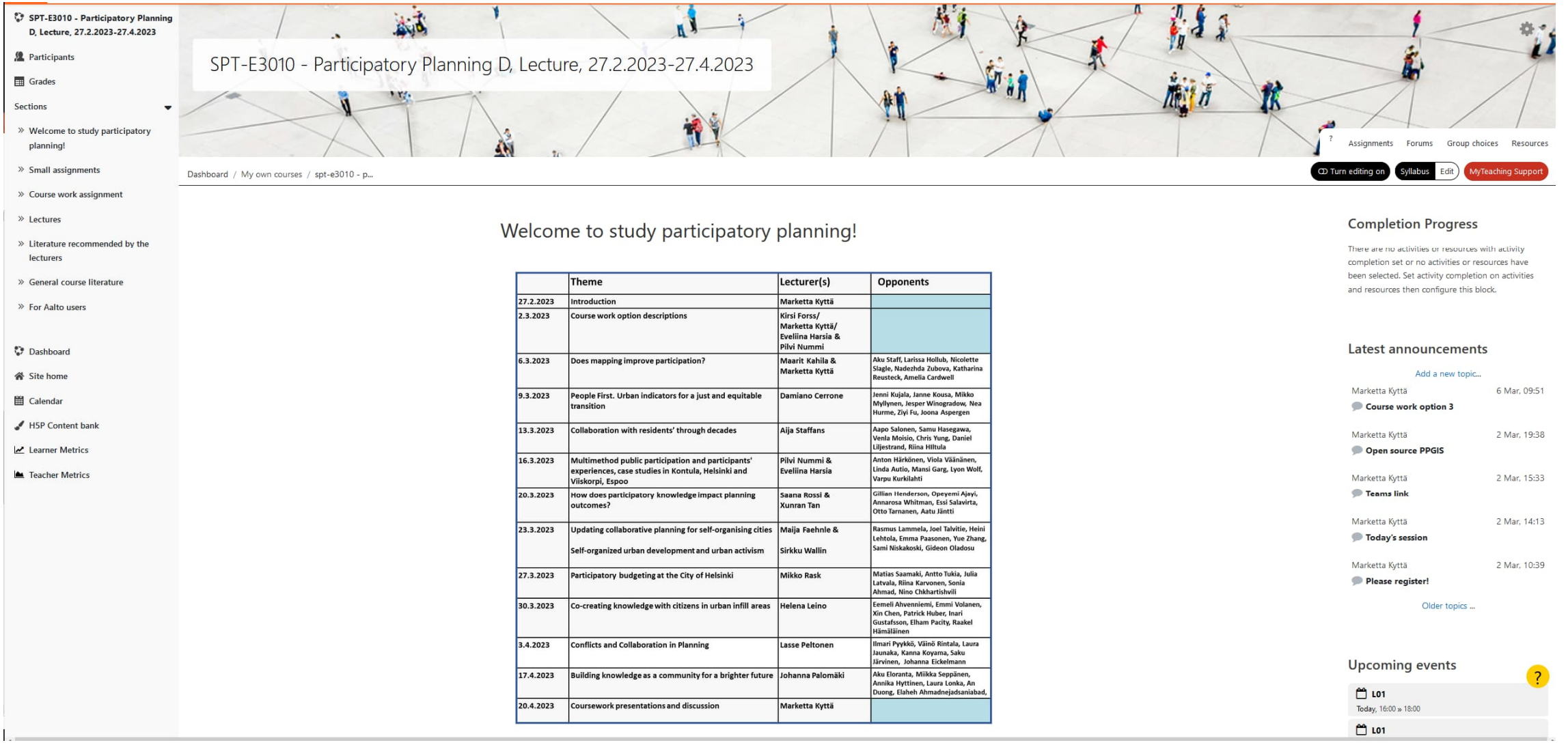
= students

= M & M



The list of opponents now available!

- If the suggested time does not suit you, please agree with another student that you will switch dates, then inform me ☺



	Theme	Lecturer(s)	Opponents
27.2.2023	Introduction	Marketta Kyttä	
2.3.2023	Course work option descriptions	Kirsi Forss/ Marketta Kyttä/ Eveliina Harsia & Pilvi Nummi	
6.3.2023	Does mapping improve participation?	Maarit Kahila & Marketta Kyttä	Aku Staff, Larissa Hollub, Nicolette Slagle, Nadezhda Zubova, Katharina Reusteck, Amelia Cardwell
9.3.2023	People First. Urban indicators for a just and equitable transition	Damiano Cerrone	Jenni Kujala, Janne Kousa, Mikko Myllynen, Jesper Winogradow, Nea Hurme, Ziyi Fu, Joona Aspergen
13.3.2023	Collaboration with residents' through decades	Aija Staffans	Aapo Salonen, Samu Hasegawa, Venla Moisio, Chris Yung, Daniel Liljestrand, Riina Hiltula
16.3.2023	Multimethod public participation and participants' experiences, case studies in Kontula, Helsinki and Viiskorpi, Espoo	Pilvi Nummi & Eveliina Harsia	Anton Härkönen, Viola Väänänen, Linda Autio, Mansi Garg, Lyon Wolf, Varpu Kurkilahti
20.3.2023	How does participatory knowledge impact planning outcomes?	Saana Rossi & Xunran Tan	Gillian Henderson, Opeyemi Ajayi, Annarosa Whitman, Essi Salavirta, Otto Tarnanen, Aatu Jäntti
23.3.2023	Updating collaborative planning for self-organising cities Self-organized urban development and urban activism	Maija Faehnle & Sirkku Wallin	Rasmus Lammela, Joel Talvitie, Heini Lehtola, Emma Paasonen, Yue Zhang, Sami Niskakoski, Gideon Oladosu
27.3.2023	Participatory budgeting at the City of Helsinki	Mikko Rask	Matias Saamaki, Antto Tukia, Julia Latvala, Riina Karvonen, Sonia Ahmad, Nino Chkhartishvili
30.3.2023	Co-creating knowledge with citizens in urban infill areas	Helena Leino	Eemeli Ahvenniemi, Emmi Volanen, Xin Chen, Patrick Huber, Inari Gustafsson, Elham Pacity, Raakel Hämäläinen
3.4.2023	Conflicts and Collaboration in Planning	Lasse Peltonen	Ilmari Pyykkö, Väinö Rintala, Laura Jaunaka, Kanna Koyama, Saku Järvinen, Johanna Eickelmann
17.4.2023	Building knowledge as a community for a brighter future	Johanna Palomäki	Aku Eloranta, Miikka Seppänen, Annika Hyttinen, Laura Lonka, An Duong, Elaheh Ahmadnejadsaniabad,
20.4.2023	Coursework presentations and discussion	Marketta Kyttä	

Aalto University
School of Engineering
Thank you!