

# THE PROS AND CONS OF USING DIGITAL PARTICIPATORY MAPPING

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## The Finnish Land Use and Building Act 2000

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aims to ensure that everyone has the chance to participate in open planning processes

#### ...BUT IN REALITY

















# CAN WE REALIZE SMARTER PARTICIPATION?



## PUBLIC PARTICIPATION GIS (PPGIS) METHODOLOGY

SoftGIS knowledge layers

HardGIS knowledge layers





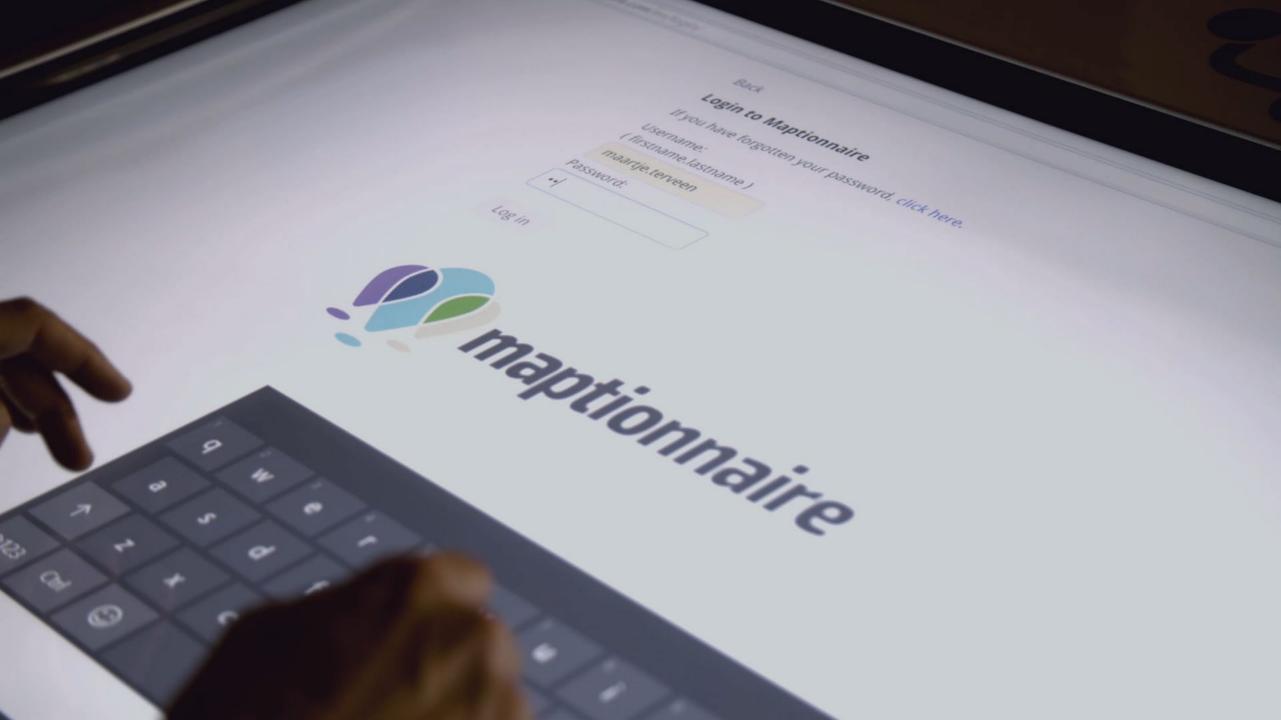
#### WHY PPGIS KNOWLEDGE?

The analysis of "soft" geographical information together with "hard" GIS knowledge

TRANSACTIONAL,
PLACE-BASED
RESEARCH

NEW APPROACH TO
PARTICIPATORY
PLANNING

Linking the user knowledge to planning and design solutions and making large-scale participation possible



EXAMPLES OF PARTICIPATORY PLANNING PROJECTS

PARKS AND RECREATION





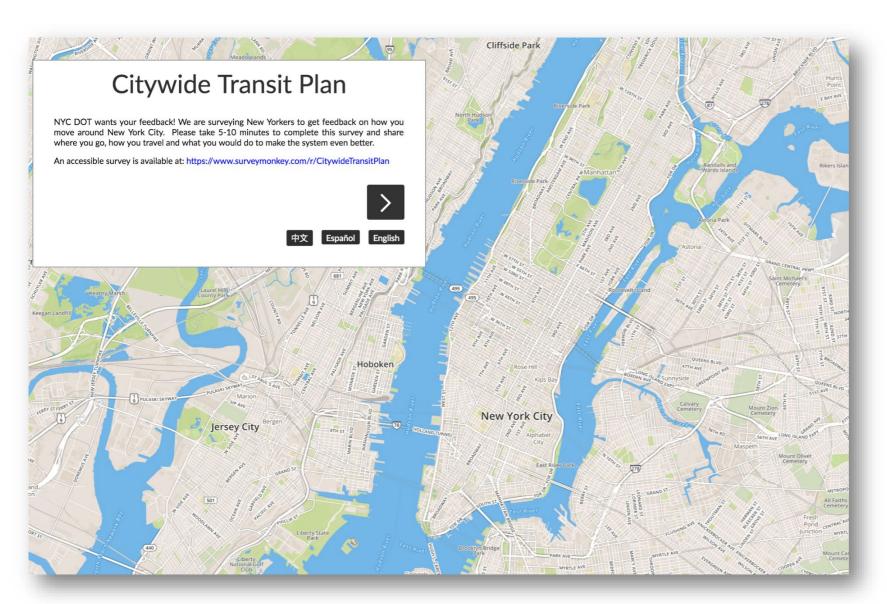
TRANSPORTATION PLANNING AND MOBILITY

BUILDING DESIGN



URBAN
PLANNING AND
DEVELOPMENT

#### TRANSIT AND TRANSPORTATION PLANNING: CITY OF NEW YORK



"We have been able to gather the richest dataset using Maptionnaire compared to any other tool or method used. New York, DOT managed to collect over 25 000 responses in a two month period using Maptionnaire."

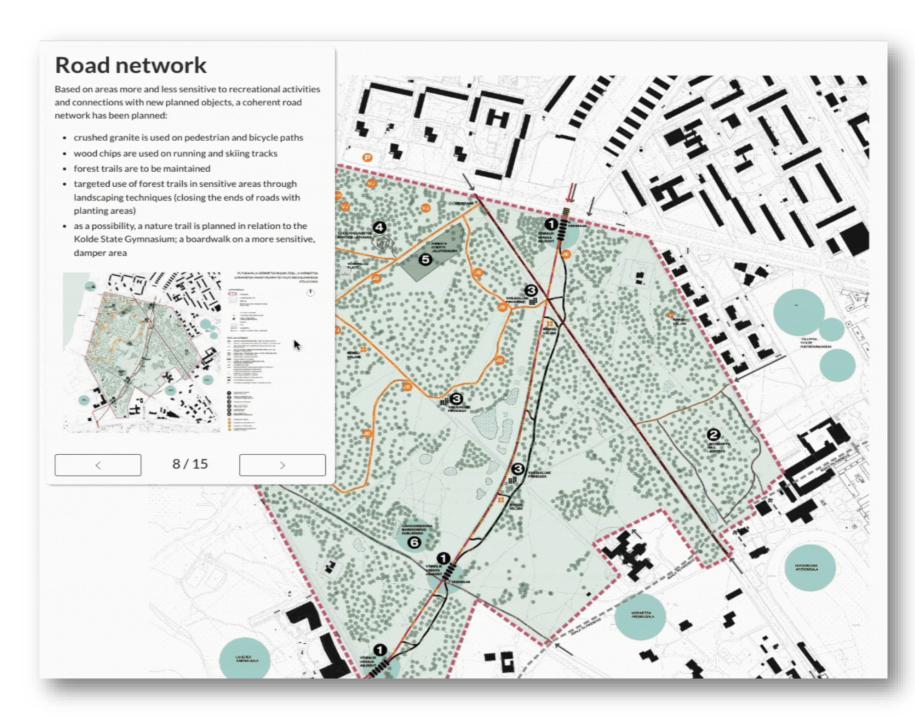
Rebecca Heywood, City of New York, DOT, Project manager

#### DETAILED AND PARK PLANNING: SÖDRA VÄRTAN, STOCKHOLM



#### POLLINATOR HIGHWAY, TALLINN

VISUAL TOOLS MAKE
PLANNING PROJECTS
MORE APPROACHABLE
AND UNDERSTANDABLE



## DO PPGIS SURVEYS WORK IN REALITY?

A review of 203 real life public participation projects using PPGIS in Finland and beyond

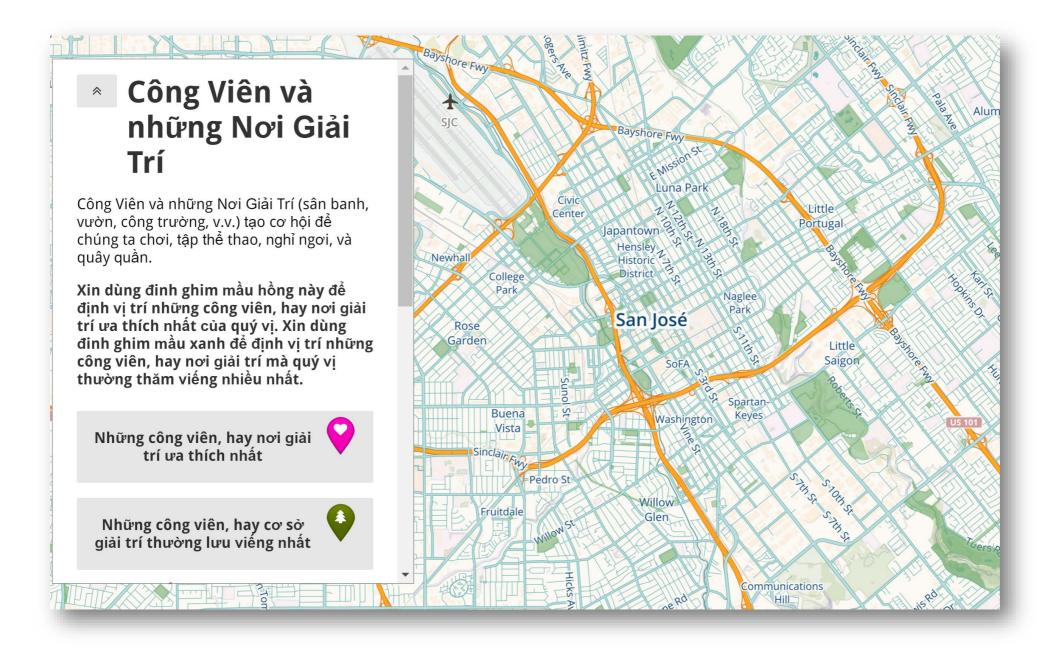
Kahila-Tani, M. Kyttä, M. & Geertman, S. (2019) Does mapping improve public participation? Exploring the pros and cons of using public participation GIS in urban planning practices. Landscape and Urban Planning, 186, 45-55.



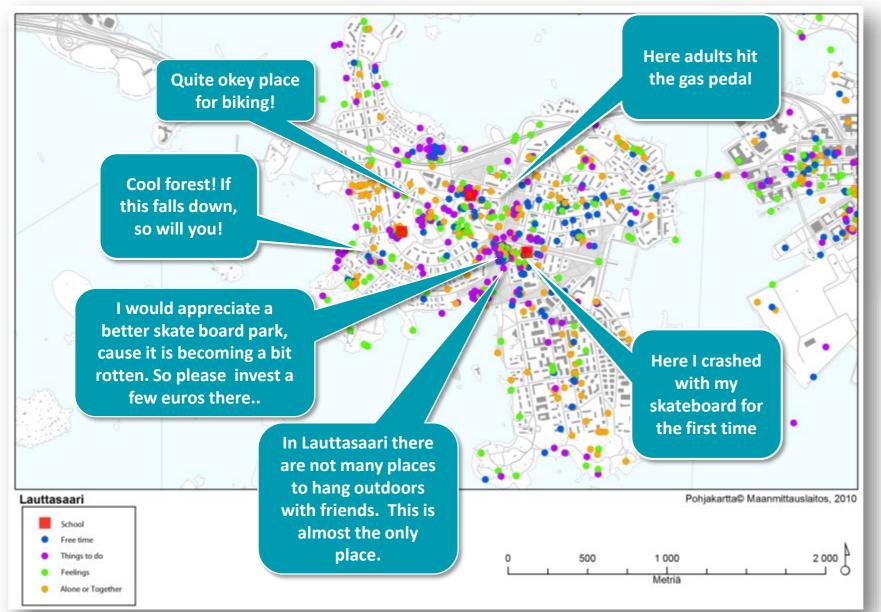




#### **INCLUSIVENESS:** NEW RESIDENT GROUPS CAN BE REACHED



#### ... EVEN CHILDREN AND YOUNG PEOPLE



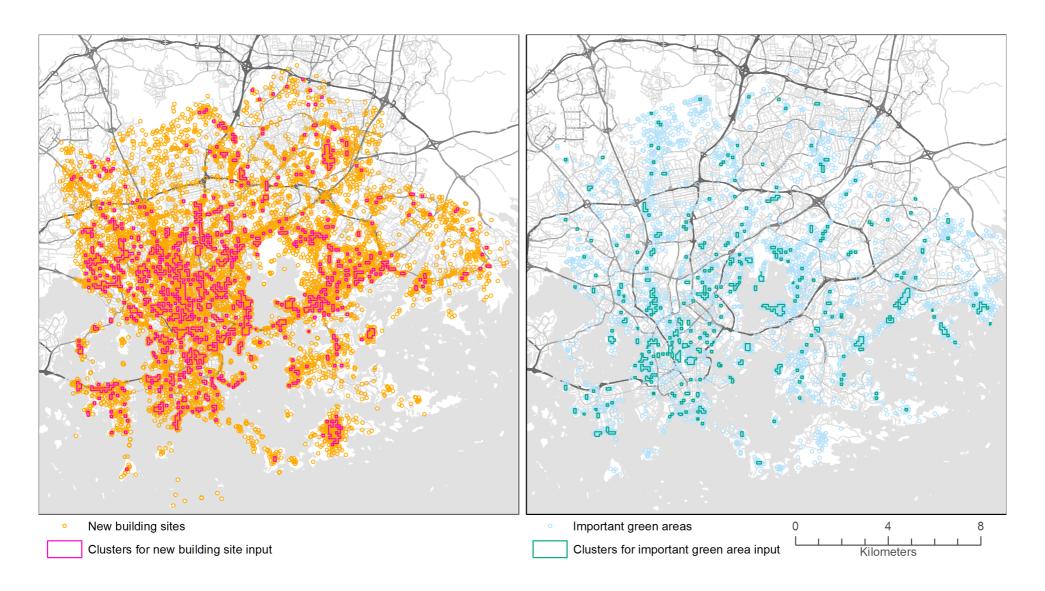


Kids out-survey in Helsinki
1100 respondents



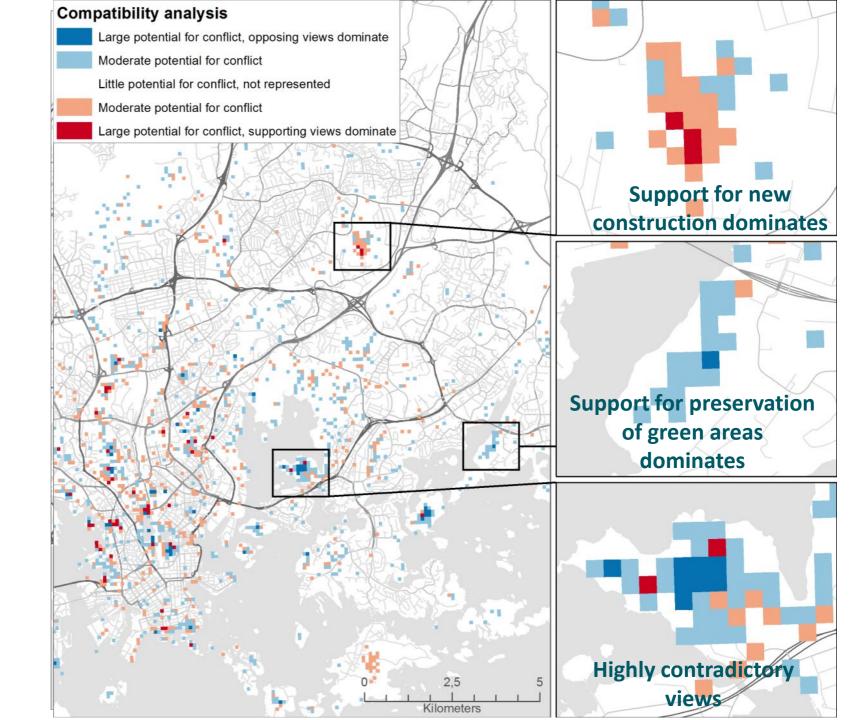
#### NEW TYPE OF KNOWLEDGE IN A VISIBLE FORMAT

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:
Compatibilityanalysis

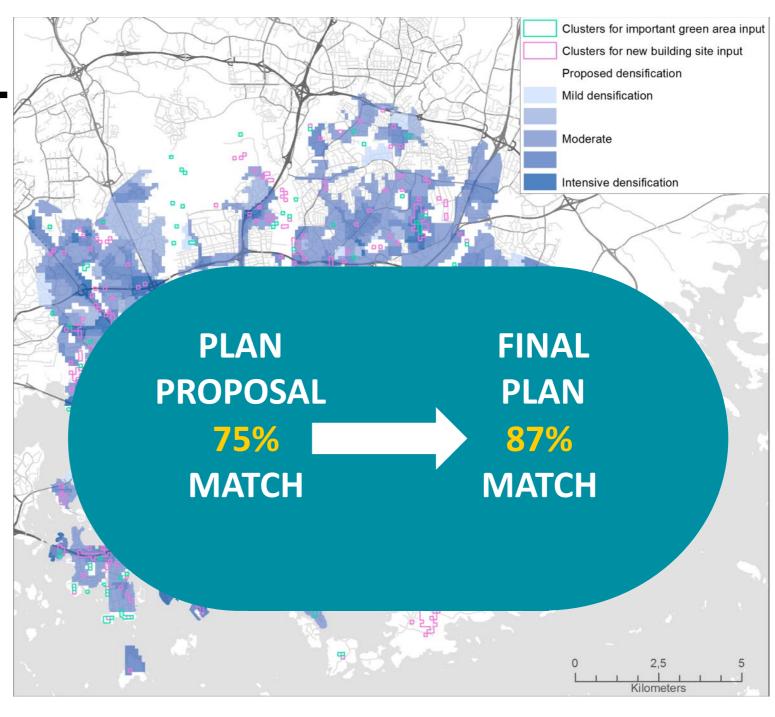




### MORE INFLUENTIAL PARTICIPATION?

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.

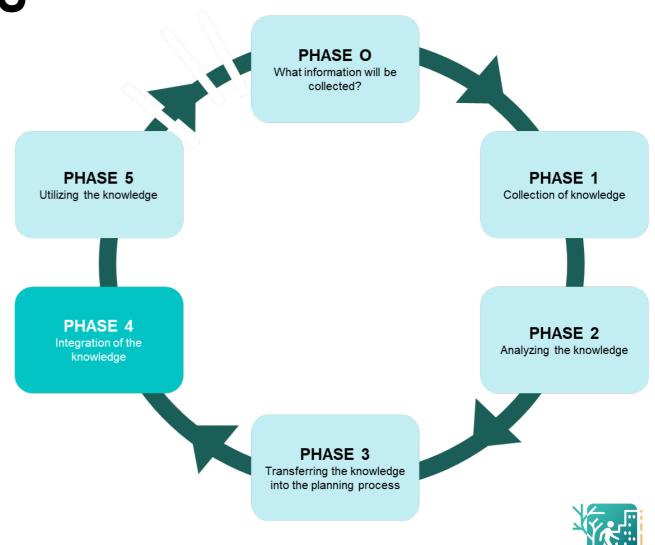


#### NOW:

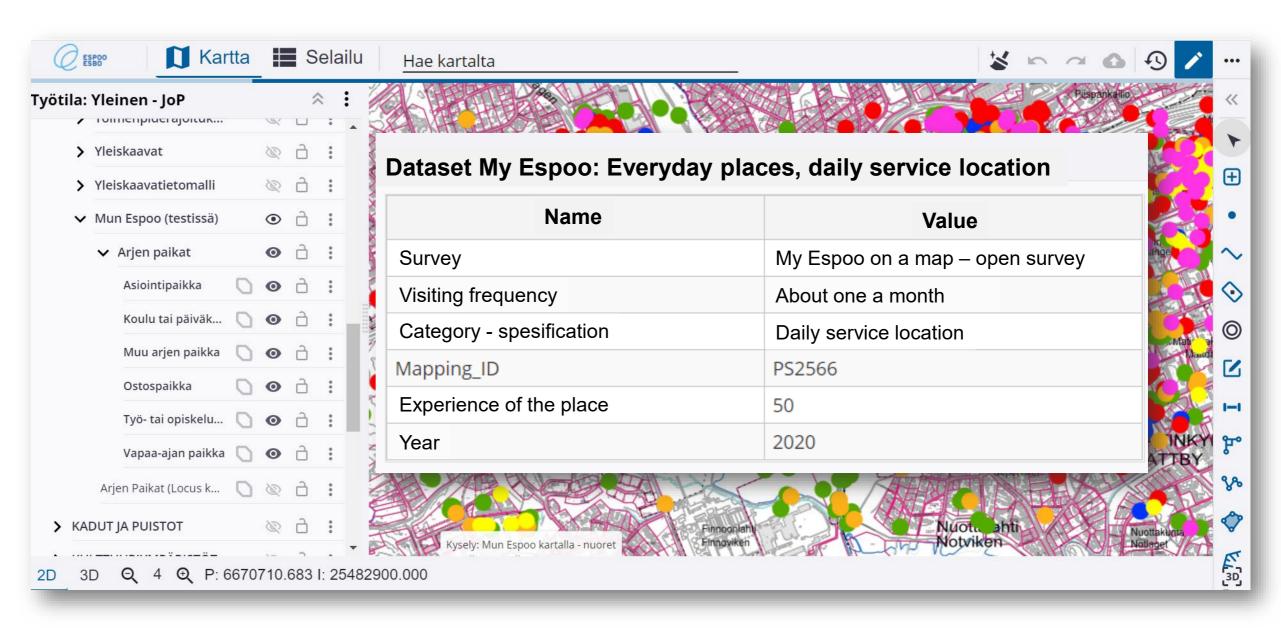
THE INFLUENCE OF
PARTICIPATORY MAPPING
KNOWLEDGE
ON URBAN PLANNING:
An interview study with 9 cases

## THE FLOW OF PPGIS KNOWLEDGE IN THE PARTICIPATION PROCESS

- Opportunities and challenges in the use of PPGIS knowledge in each phases were identified
- In 89% of cases the knowledge was seriously considered in the decision making
- In 67% of cases the influence of the knowledge can be concretely seen in the planning outcomes
- The biggest bottle-neck in Phase 4: a lot of produced knowledge not suitable for the project at hand



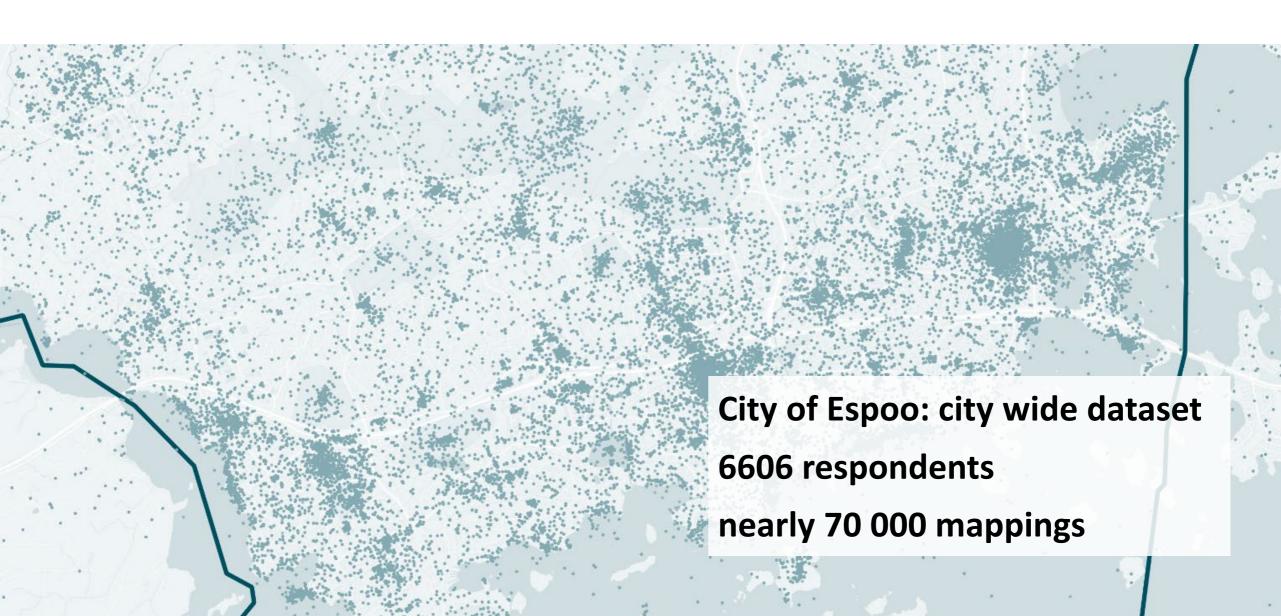
#### SYSTEMATIC STORAGE OF PPGIS DATA: LOCUS CLOUD



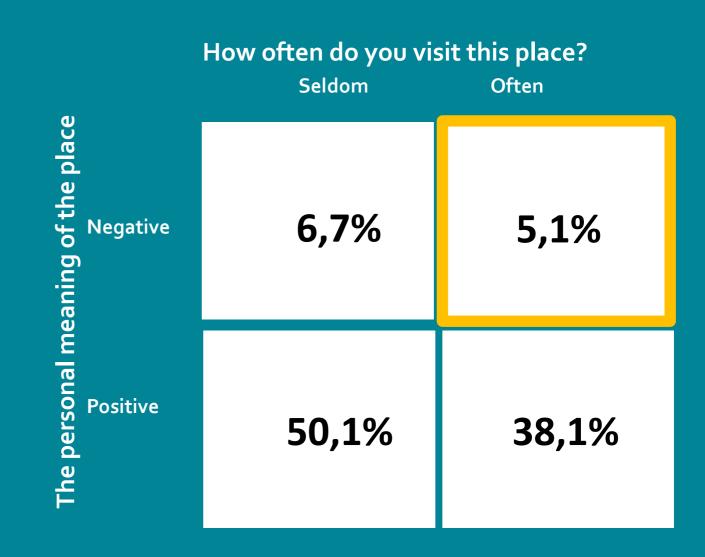


# RESEARCH & PRACTISE INTEGRATION

#### RESEARCH WITH CLOSE COLLABORATION WITH PRACTITIONERS



#### THE DEVELOPMENT OF PRIORITIZATION MODEL



Kyttä, M, Randrup, T, Sunding, A, Rossi, S, Harsia, E, Palomäki, J & Kajosaari, A (2023) Prioritizing participatory planning solutions: Developing place-based priority categories based on public participation GIS data. LANDSCAPE AND URBAN PLANNING vol. 239, 104868.

## THE PREDICTIVE MODEL OF THE PERCEIVED QUALITY OF GREEN AREAS

Kajosaari, A. Hasanzadeh, K. Kuusisto-Hjort, P. Fagerholm, N. Nummi, P. & Kyttä, M. (2023) Predicting context-sensitive urban green space quality to support urban green infrastructure Planning. Landscape and Urban Planning. Vol 242, 104952.

