

Travel behaviour and planning of the Reykjavik capital region

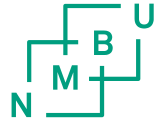
Introduction to the seminar

Nordic house Reykjavik 3. June 2019

Introduction to the seminar

- Introduction of the results from 2 research projects
 - **RESACTRA-IS** (Byreg/NMBU in cooperation with HI)
 - **SuReCaRe** (HI)
- Short about the project aims and data collections
- The structure and themes of presentations from the 2 projects
- **Panel discussion:** What do the research findings mean for the planning of the Reykjavik capital area to reach goals on sustainable travel behaviour?

PEOPLE



The project team RESACTRA-IS

- Dr. Harpa Stefansdottir, Associate Professor, BYREG, NMBU, project leader
 - Dr. Petter Næss, Professor, BYREG, NMBU (project leader RESACTRA Norway)
 - Dr. Sebastian Peters, Associate Professor, BYREG, NMBU
 - Dr. Tim Richardson Professor, BYREG, NMBU
 - Dr. Jukka Heinonen, Professor, Faculty of Civil and Environmental Engineering, University of Iceland
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- Funders: National Planning Agency, The Icelandic Road Administration, Småforsk NMBU

The project team SuReCaRe

- Dr. Jukka Heinonen, Professor, Faculty of Civil and Environmental Engineering, University of Iceland, project leader
 - Dr. Michał Czepkiewicz, Postdoctoral researcher, University of Iceland
 - Áróra Árnadóttir, PhD candidate, University of Iceland
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- Funded by UI, National Planning Agency and The Icelandic Road Administration

RESACTRA-IS

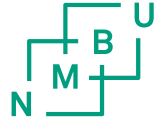
RESidential location,
ACTivity participation and
TRAVel behaviour



- The overall aim of the project is: **How do the location and neighborhood characteristics of residential areas affect travel behavior in the context of the Reykjavík capital region?**
- The project focuses on the urban structural situation of the dwelling, how the location and neighborhood characteristics of residential areas affect travel behavior and activity participation.
- The project has produced knowledge relevant for planning and strategies for a good urban environment, residential development and coordinated land use and transport solutions related to the particular context of the Reykjavik capital region.

RESACTRA

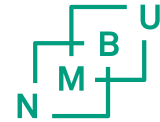
RESidential location,
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- **The RESACTRA-IS benefits from a recently completed research project in Norway called RESACTRA**
- Mainly same aims, research questions and methods
- This creates an opportunity to conduct comparative study of Icelandic conditions with cities in Norway
- Project leader is Petter Næss Professor Byreg, NMBU
- Funded by Research Council Norway
- **Case studies in Oslo and Stavanger:**
 - Web-based questionnaire survey to 15,000 addressees in Oslo and Stavanger in 2015
 - The samples used in the analyses consisted of 1904 persons in the Oslo case and 1328 in the Stavanger case, totaling 3232
 - 33 qualitative interviews, 1-1,5 hour long



Publications from the Norwegian RESACTRA project



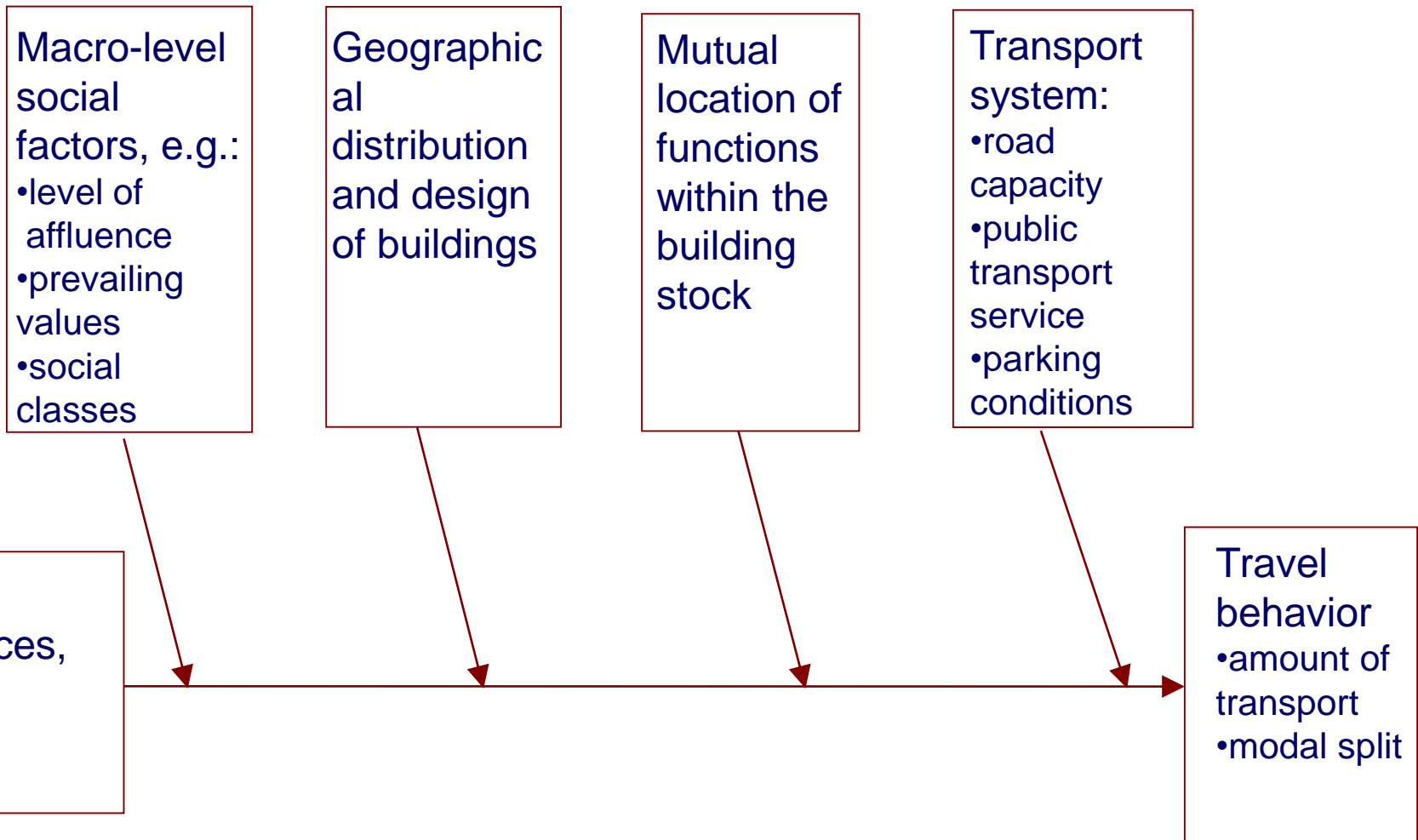
- 13 peer reviewed papers
- 1 per reviewed book chapter
- 3 other articles
- more on the way

See list of publications:

www.nmbu.no/go/resactrais PROJECT PUBLICATIONS

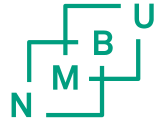
This webpage will be used to inform about publications from the projects

Influences of urban spatial structures on travel



Assumed causal relationships between different built environment characteristics and travel behavior. Characteristics included in the statistical analyses of the RESACTRA project are shown with bold outline.

Methodological approach



Combination of qualitative and quantitative research methods + theoretical reasoning

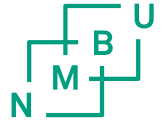
Why mixed methods?

Identify **the causal mechanisms** through which the built environment influences travel behavior

- Uncover, urban structural conditions influence travel behavior **whether, and to what extent**
- + gain more detailed comprehension of **how and why** such influences occur, explanatory interviews (See Næss, 2004 for a more thorough discussion)

Quantitative approach has been dominating often with little theoretical reflection on the causal mechanisms underlying observed correlations.

Data collection

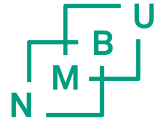


- Web-based questionnaire survey to 10.000 addresses in the Reykjavik capital in 2016
 - Randomly selected, more addresses in newly built areas (before and after studies)
- The samples used in the analyses consisted of 1147 persons
- 13 qualitative interviews, 1-1,5 hour long
- Interviewees identified among survey respondents willing to participate, based on their residential location and sociodemographic characteristics

Quest for SUsustainable REYkjavik CApital REgion: lifestyles, attitudes, transport habits, well-being and climate impact of young adults

- **Investigates interrelationships between urban form at a residential location, mobility styles, and travel patterns of young adults in Reykjavik Capital Region**
- association with two sustainability outcomes
 - satisfaction with life domains
 - greenhouse gas (GHG) emissions
- Mixed-method approach:
 - Survey among the adults in 2017 with softGIS method, 780 responses.
 - Qualitative interviews with selected survey respondents 2018-2019.
- Main aims:
 - identify distinct mobility styles based on travel patterns, residential location, and related preferences
 - investigate relationships between the mobility styles, and two facets of urban sustainability: subjective well-being, and greenhouse gas (GHG) emissions
 - explain causal mechanisms and elicit personal rationales behind observed associations

Presentations of research findings from the projects



- Residential location and intra-metropolitan travel – what are the aggregate patterns?
Petter Næss
- What are residents' rationales for their travel behavior and activity choices?
Sebastian Peters
- Neighborhood characteristics and active travel
Harpa Stefansdottir
- Daily travel patterns of young adults
Michał Czepkiewicz
- Downtown dwellers' globalized lives
Jukka Heinonen