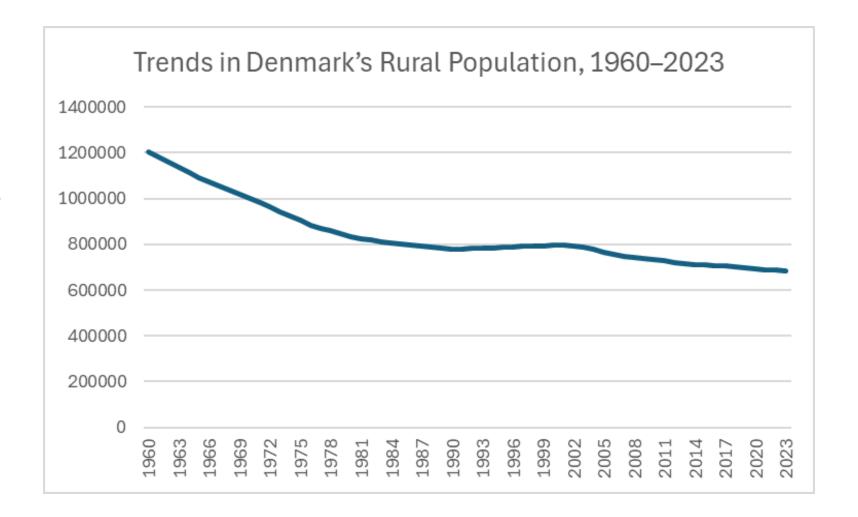


Exploring urban redevelopment opportunities for an aging population

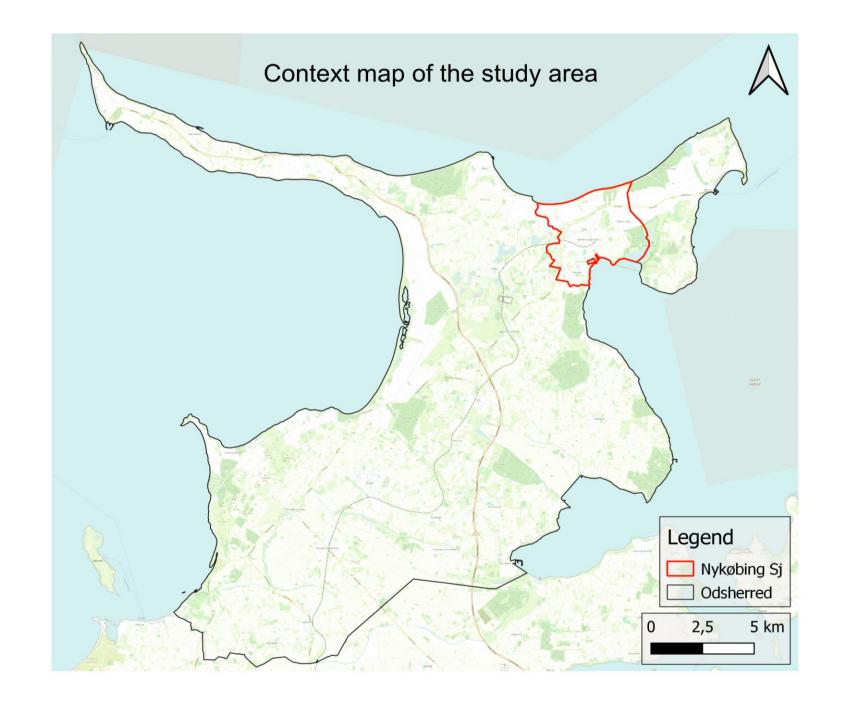


## Introduction

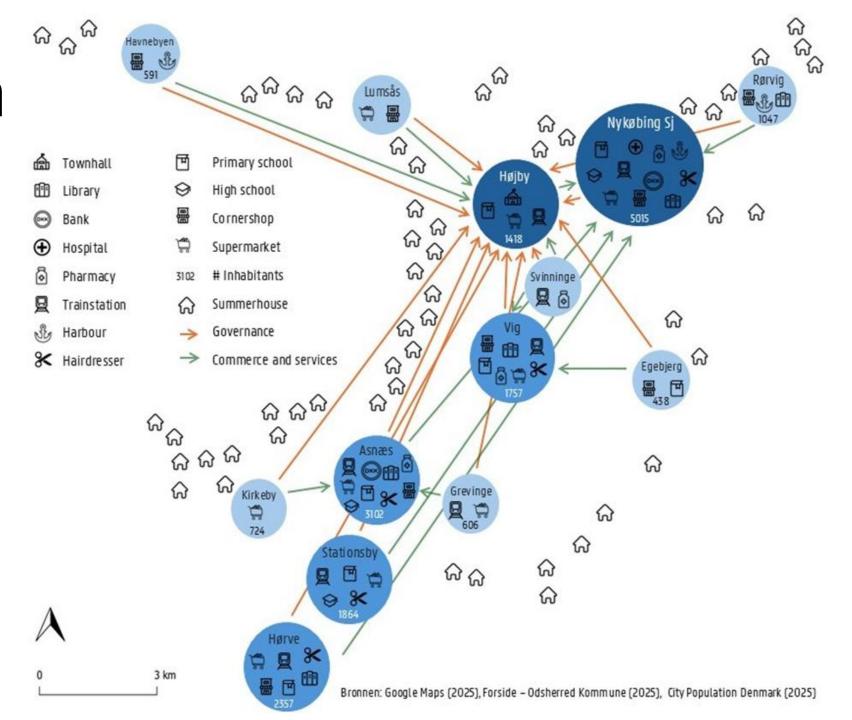
- 26% → 11% rural population
- Average age higher in rural area than urban area



## Study Area



## Study Area



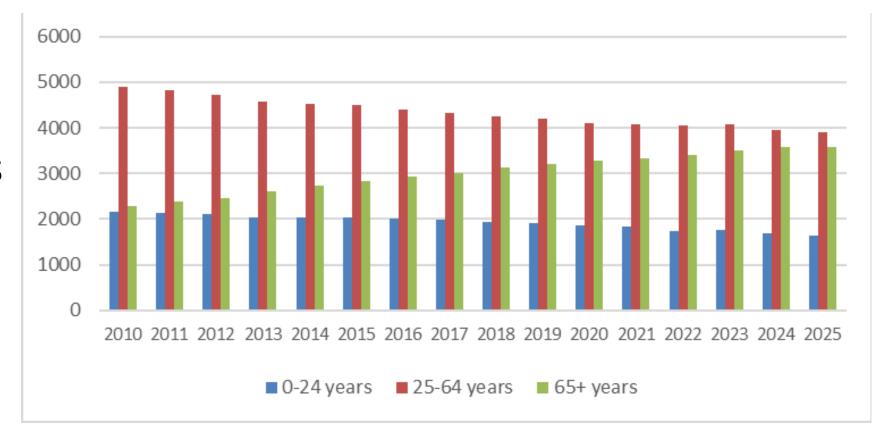
### Motivation

### Population changes in Nykøbing (2015 – 2025)

Migration

Economy and jobs

Household composition



## Research questions

What are the **opportunities** for potential urban **redevelopment** of Nykøbing in function of **walking preferences** of the aging population?

- 1. How is the current spatial structure?
- 2. What exactly are the needs of the people using the town's functions?
- **3.** How does the ageing population affect the need for certain urban functions?
- **4.** Which areas are most desired for redevelopment?

### Workflow

#### **CONTEXTUAL WINDOW**

#### Literature review

- Past vs. present
- Other redevelopment examples
- Current spatial plans of the municipality

### GIS desktop analysis (RQ1)

- Mapping zones of different functions
- Multiple Estate Model

#### **METHOD**

#### PPGIS (RQ4)



- Preferred location of service
- Flower of proximity

#### Surveying (RQ2)

Use of both qualitative and quantitative methods

### Clustering (RQ3)

- K-means
  - 5 general subgroups

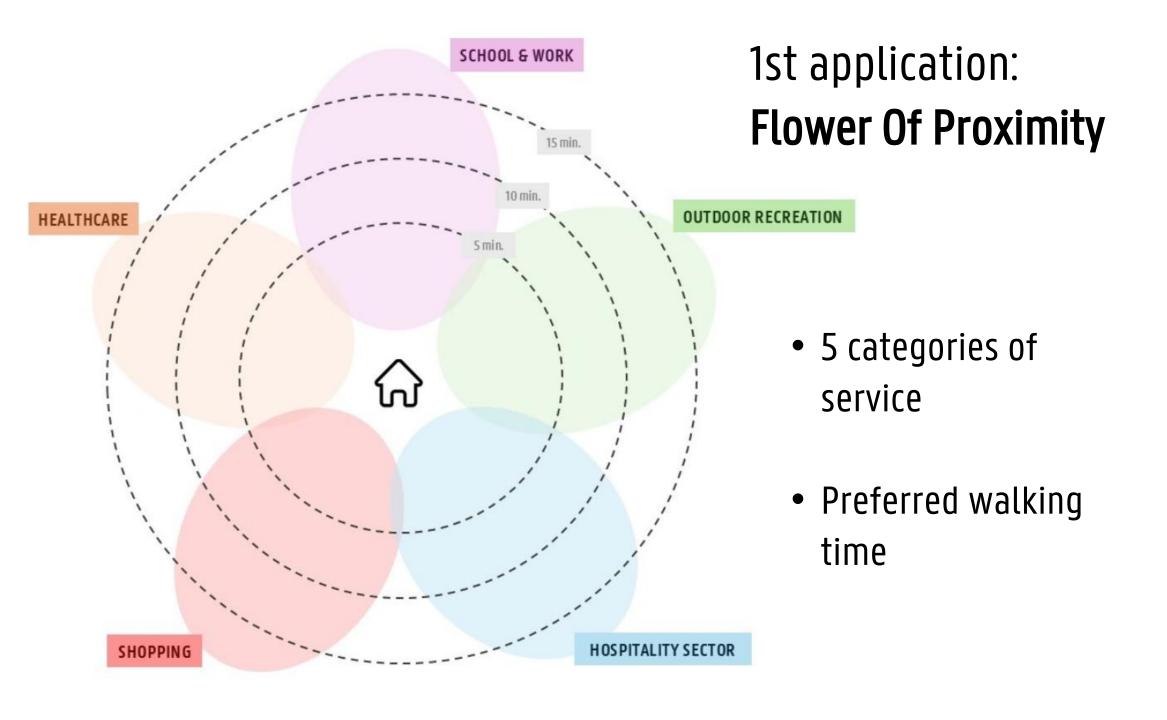
### **OUTCOMES**

Policy recommendations



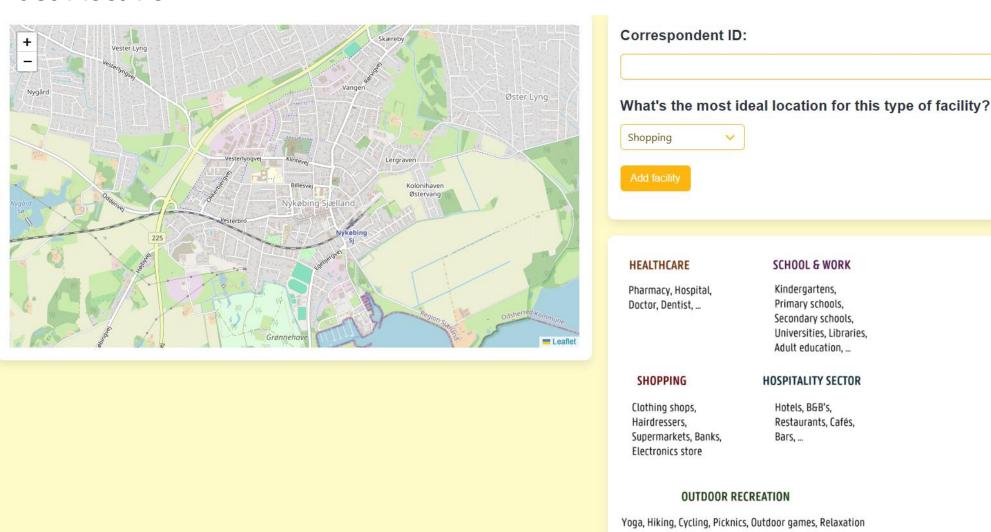




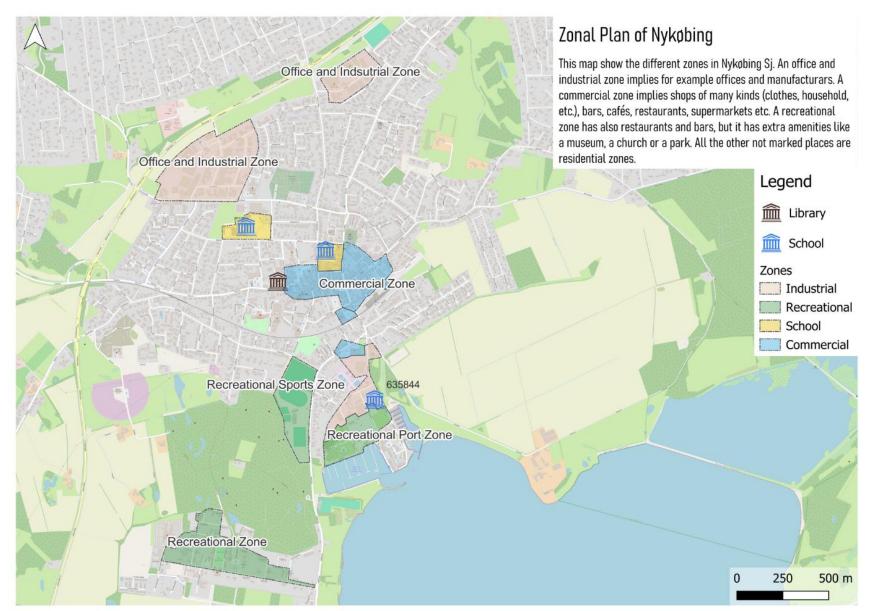


### 2nd application: **Preferred Location and residence**

- Most important facility
- Ideal location



## Current Spatial Structure (RQ 1)



## Results: What are the needs of the people using the town's functions (**RQ 2**)



## Results: How does the ageing population affect the need for certain urban functions? (**RQ 3**)

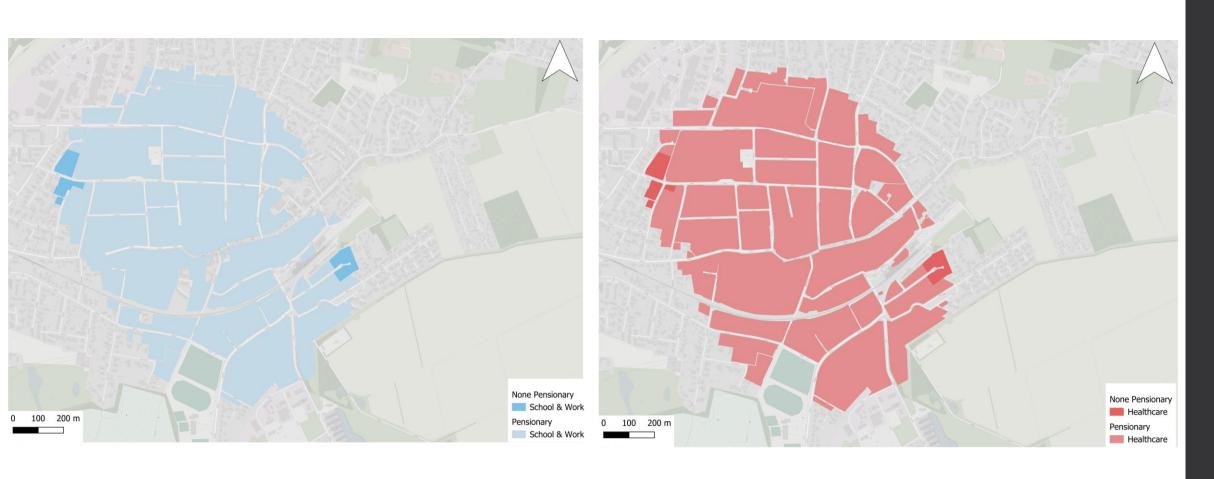
### Cluster Definition and Mean Satisfaction Scores (1-5)

Profile			Commuting	Shopping	Leisure	Healthcare	Food & drinks
Younger mixed-household, mostly local, modest transport reliance.		3.0	4.25	3.67	3.25	3.33	
	Older locals living alone, high use of personal transport.		2.83	4.0	3.5	3.17	2.67
	Young locals dependent on public transport, living with family.		3.33	3.17	3.83	3.83	3.33
	Older couples with high car reliance.		3.2	4.1	3.75	3.44	3.7
	Middle-aged local families with mixed transport, leaning toward cars.		3.13	4.0	4.29	3.13	3.17

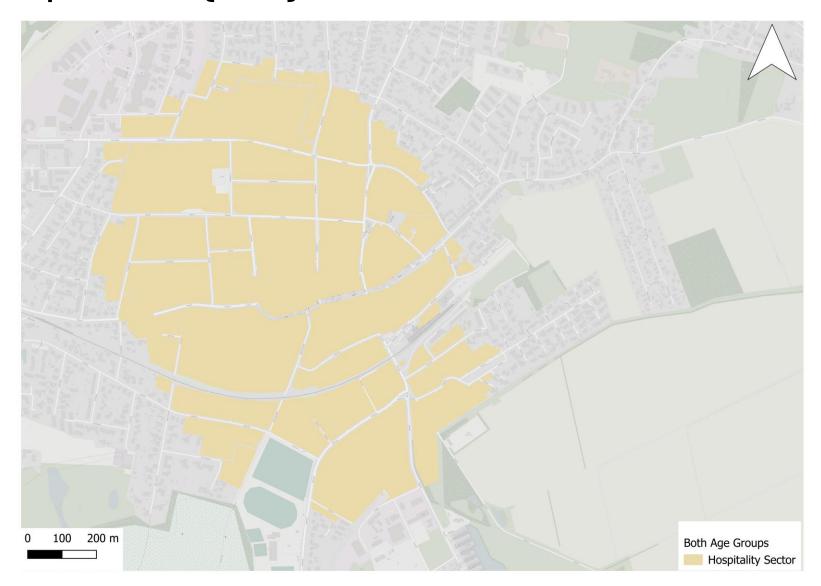
## Results: Qualitative aspect (**RQ 263**)

Cluster	Needs	Quote
Younger, mixed households	Complaining about longer travel times: hospital, bars and education.  Mostly visiting Copenhagen	"it's a good place to live as a pensioner but not as a teen/young adult"
Older locals alone	Rest and nature are perceived as the most important needs, followed by concerns about healthcare.	"Quiet, nature, and the coastline"
Very young dependent on public transport	More parks, specific sport venues needed lack of social options. visiting Holbaek and Roskilde	"I would like to live socially in the city"
Older couples, high car dependency	Rest and nature are widely appreciated, with the main concern being the disappearance of specialty shops and local healthcare.	"Businesses open and close frequently; it's tough to be an independent owner here."
Middle-aged	Mostly attracted by cultural activities, cheaper housing and thinking about their future. Visiting Vig, Højby and Copenhagen	"The youth is moving away because the schools closed down"

## Spatial Patterns of Desired Redevelopment: Pensionary vs. Non-Pensionary Groups (**RQ 3&4**)



## Spatial Patterns in Desired Redevelopment According to the General Population (**RQ4**)



## Spatial Patterns in Desired Redevelopment According to the General Population (**RQ4**)



### Policy recommendations

Focus group: Specifically older locals living alone, generally commuting

- 1. Qualitative data  $\rightarrow$  Decentralized health access + Senior first mobility
- 2. Quantitative data  $\rightarrow$  Commuting infrastructure + Food & beverage outlets

Profile	Commuting	Shopping	Leisure	Healthcare	ood & drinks
Younger mixed-household, mostly local, modest transport reliance.	3.0	4.25	3.67	3.25	3.33
Older locals living alone, high use of personal transport.	2.83	4.0	3.5	3.17	2.67
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### Discussion

Relatively low number of correspondents



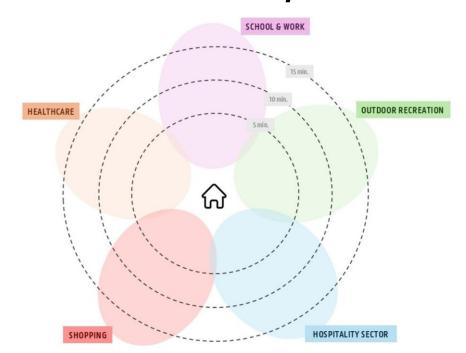
Mismatch between "reported satisfaction" and "expressed need"



Possible misinterpretation of the Flower Of Proximity



Shopping	Healthcare
4.25	3.25
4.0	3.17
3.17	3.83
4.1	3.44
4.0	3.13



### Conclusion

01

### Main Focus

Older locals living alone – highest vulnerability and lowest satisfaction scores

02

### Main findings

- Poor mobility
- Limited dining
- Poor healthcare

03

### Policy Recommendations

- Senior shuttles
- Decentralized care
- food & beverage

# Thank you very much for your attention!

If you have questions don't hesitate to ask