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Ageing in the Arctic

Developing age-friendly cities
and communities in the North

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Fabric+

We co-design solutions to issues facing northern communities, cities and regions.

- Architecture and design
- Health and wellbeing
- Local development





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-11° / +30°

Temperature variation in the
last 13 months
(from Aug. 2023)

-9.4° / +6.6°

Temperature variation
in Dec. 2022

55,000

inhabitants

305%

Expected growth of individuals
over 90 year of age in Bodø
Municipality by 2050
(SSB, population projection)

146%

Expected growth of individuals
aged 80-89 in Bodø
Municipality by 2050
(SSB, population projection)





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«How the heck do people cope with
all this snow and ice when they
age?»

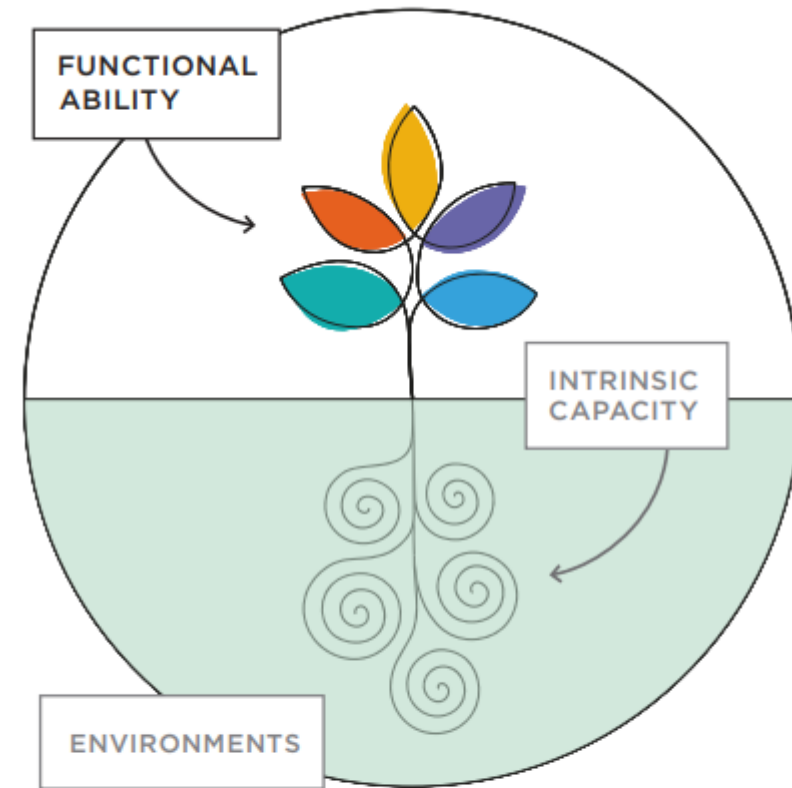


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**Agefriendly cities and
communities framework**



**DECADE OF
HEALTHY AGEING**



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How is winter experienced by
senior citizens?



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"The high snowbanks along the roads are the biggest challenge when I'm out walking."

Participant, Senior Walk

How do weather and road conditions affect the ability to **be independent** and maintain a high **quality of life**?





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Siri Arntzen-Ratnarajan
Project Manager
Lead, Urban and Regional
Development
Fabric+



Janakan Ratnarajan
Lead, Health
Frailty, Medicine, Geriatrics IDHC
(Inclusive Design for Health Care)

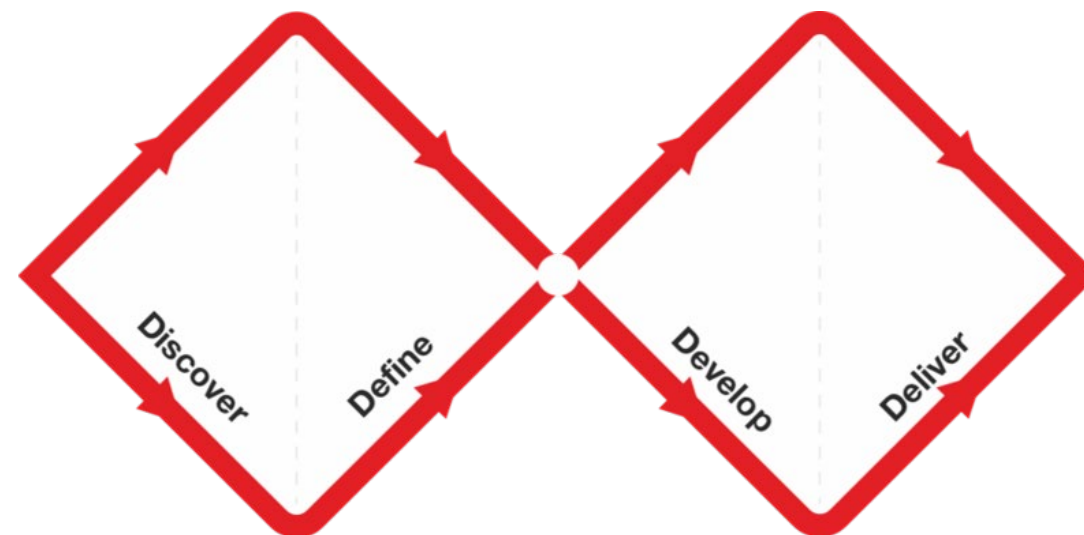
An integrated team with design as our guide



Margarita Chaskopoulou
Lead, Urban Design
Architect and Urban Designer
Fabric+



Kjell-Are Vassmyr
Assistant Project Manager
Planning, Regulation, and Risk
AT Arkitektur



Francis Odeh
Senior Physician and Manager
Collaborator, Municipal Services
Bodø Municipality



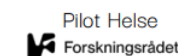
Ingunn Lindbach
Project Manager, Phase 2
Architect and Senior Urban and
Regional Planner
Fabric+

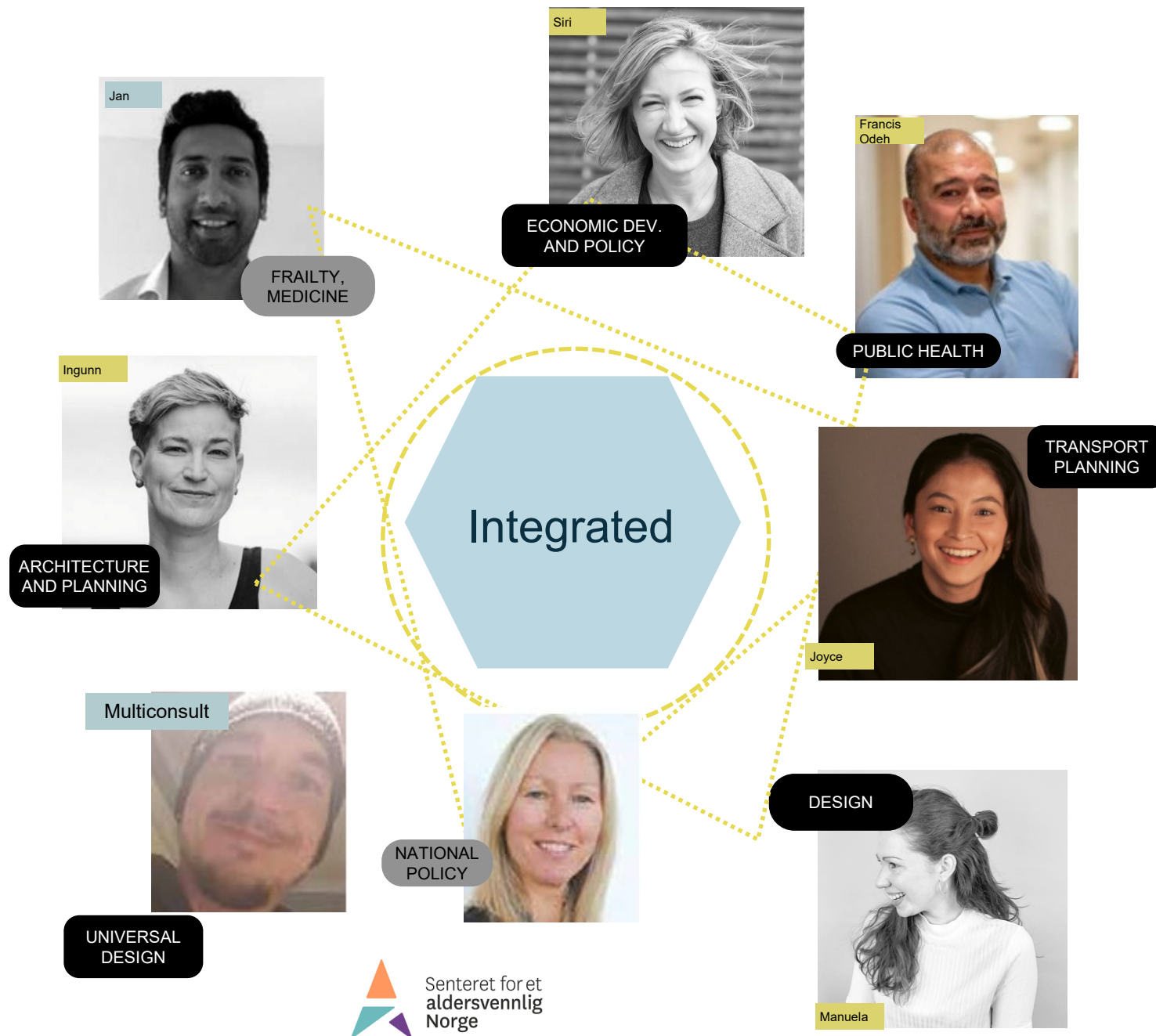
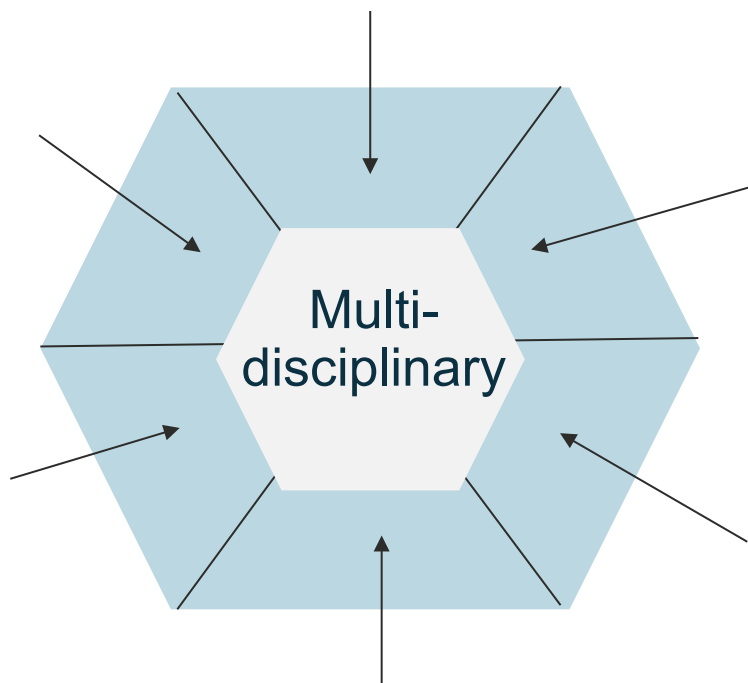


Anne Berit Rafoss
External Advisor, Age-Friendly Urban
and Regional Development
Senteret for et aldersvennlig Norge
(The Center for an Age-Friendly
Norway)



Marcus Zweininger
External Advisor, Universal Design
Multiconsult





We consulted **over 300 seniors** using a wide variety of methods



27 insights across 5 topics

1. The impact of winter on senior citizens in Bodø
2. Falls and fall prevention
3. Agefriendly winter city
4. Transport and mobility
5. Services (voluntary / public)

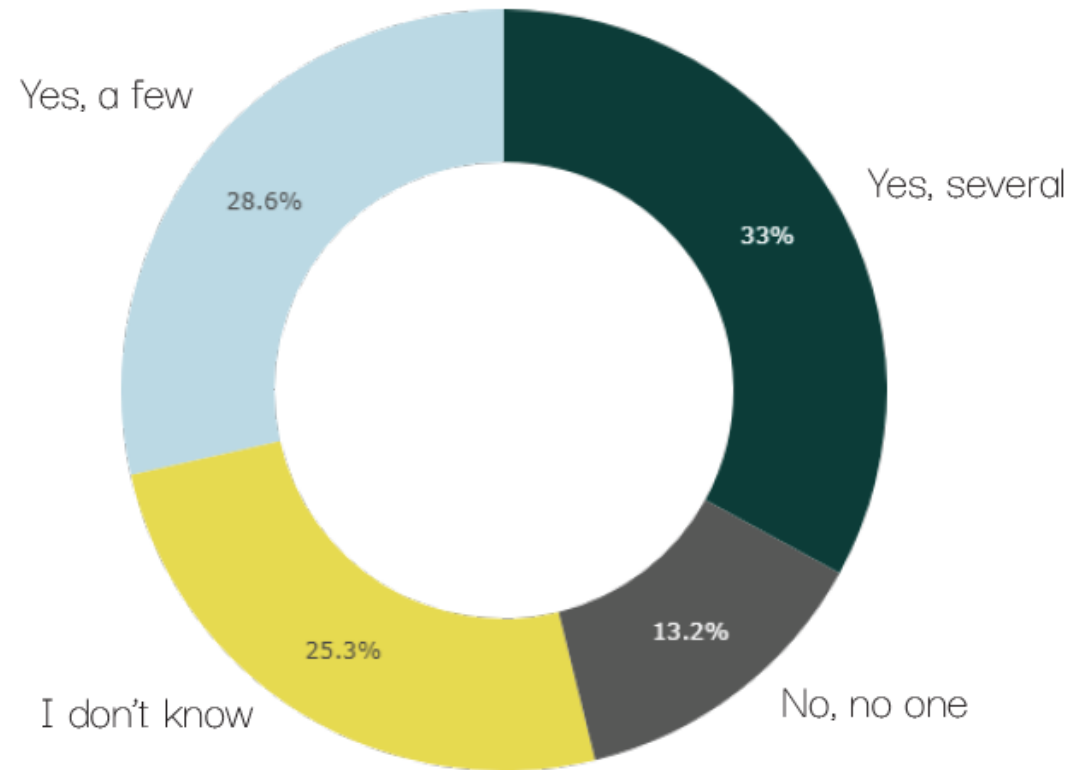


Weather and road conditions exacerbates isolation

Over 60% know «some» or «several» elderly who avoid going out in winter

It affects people's sense of SAFETY, ACTIVITY level, HEALTH, and their DESIRE to go outside.

Do you have anyone in your social circle that avoids going out in winter due to weather conditions?



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«When 56 percent of Bodø's aging population does not dare to go outside in winter when 33 percent are afraid of falling when the municipality spends NOK 20 million due to hip fracture after a fall then it is time for Bodø city council to take action.»

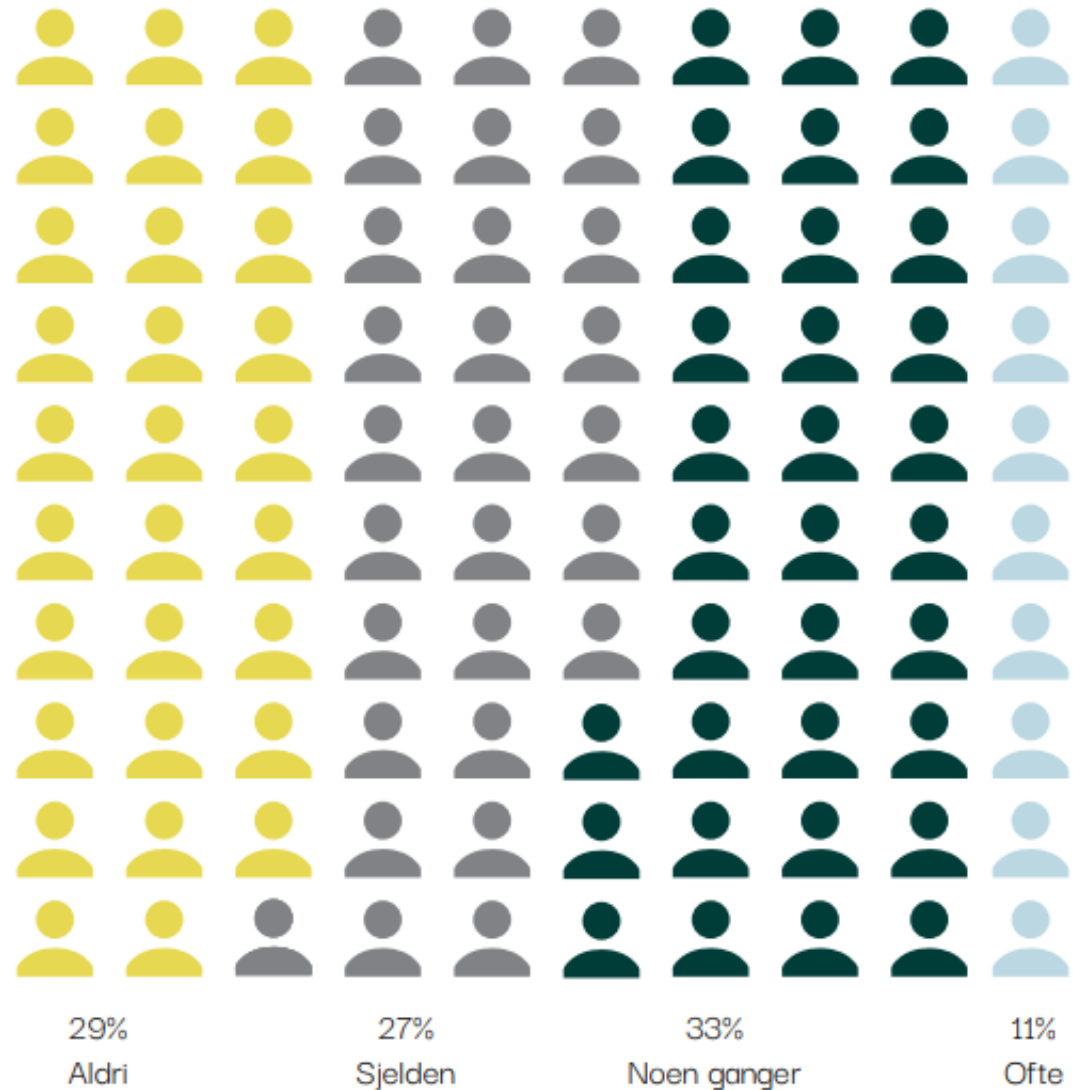


How often have you felt like you lack company this winter?

44% often / sometimes
lack company in
winter...

Worsened by...

- Living alone
- Previous falls
- Increasing age

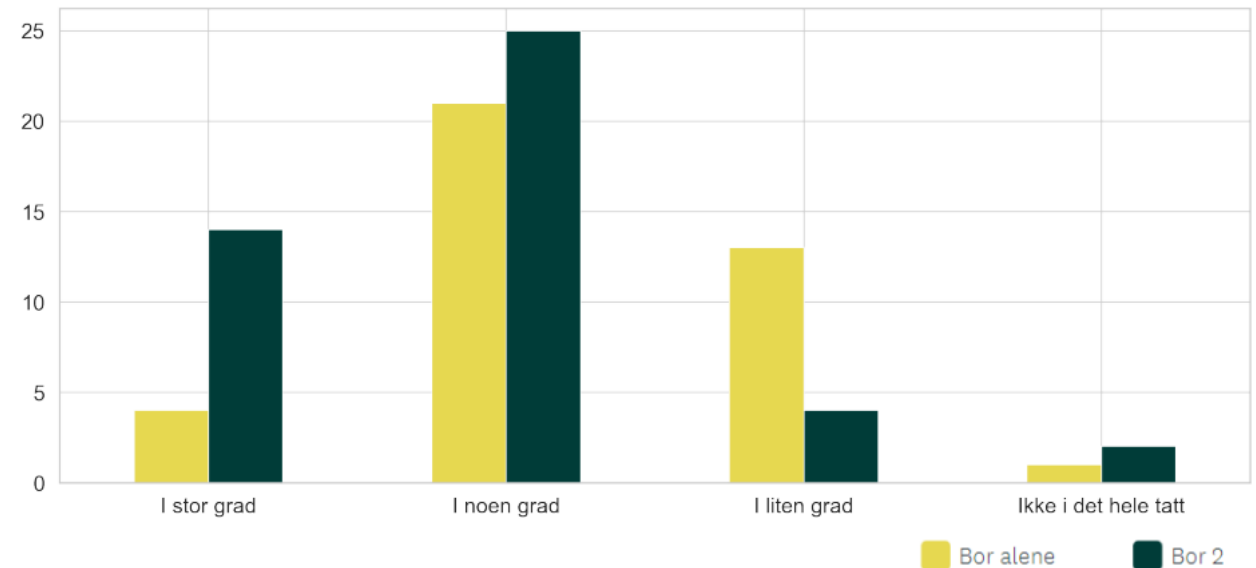


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Those who live alone report on experiencing their neighbourhoods as **more inaccessible**, and feeling **more unsafe**.

To what degree do you feel like your neighbourhood has good accessibility, and feel safe to walk in during winter?



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«Universal design» gets cancelled during much of the winter months



Studenter måler bredden av gang og sykkelveien i Bodø sentrum, som del av å kartlegge graden av universell utforming.
©Per-Inge Iohnsen/ Bodø Kommune





The cost of one hip fracture..

- 51,000 euros is the cost for each hip fracture
- 76 hip fractures on average per year in Bodø
- Cost for society 3,4 million euros per year, of which half is being paid by the municipality
- 95,000 euros saved for two hip fractures that are prevented



Respondents who had
experienced a fall before feel
more unsafe in their
neighbourhoods

After falling on a holiday I am really
scared to go outside where the
sidewalks are slippery

Respondent



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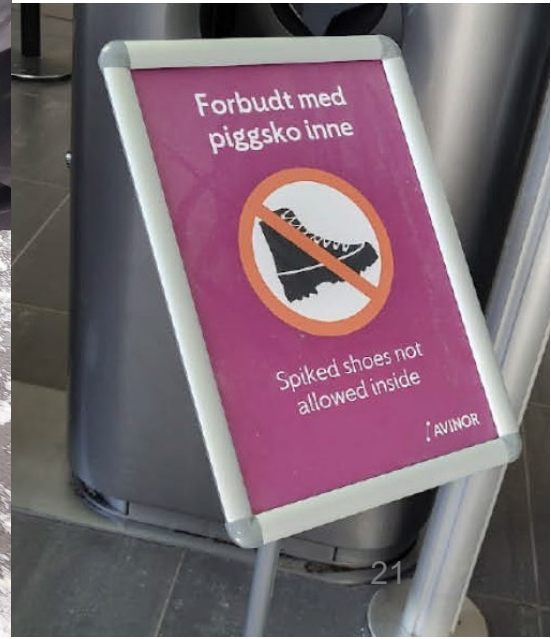
Bodø is not a
«spike-friendly
city»

How easy is it to use
personal walking
aids?



We need seating to be able to take
our spikes on and off.

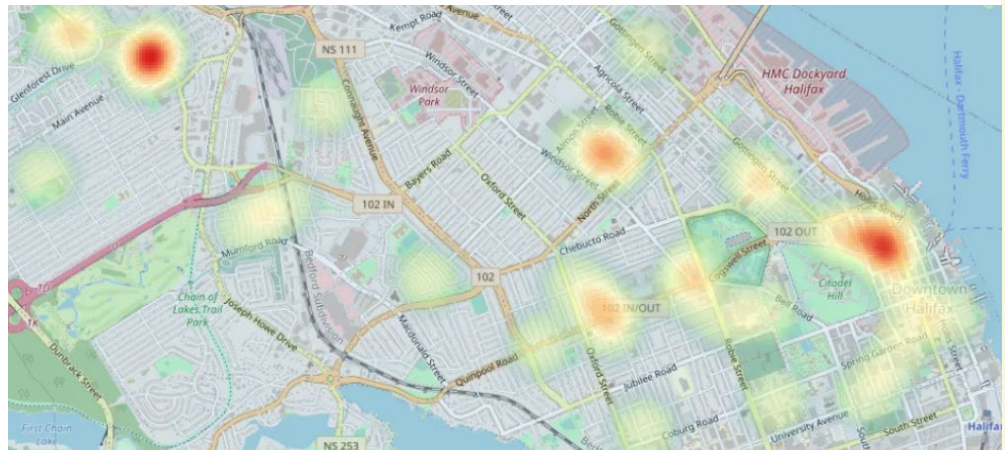
Mann, 82



Shopping malls
are important
places in winter

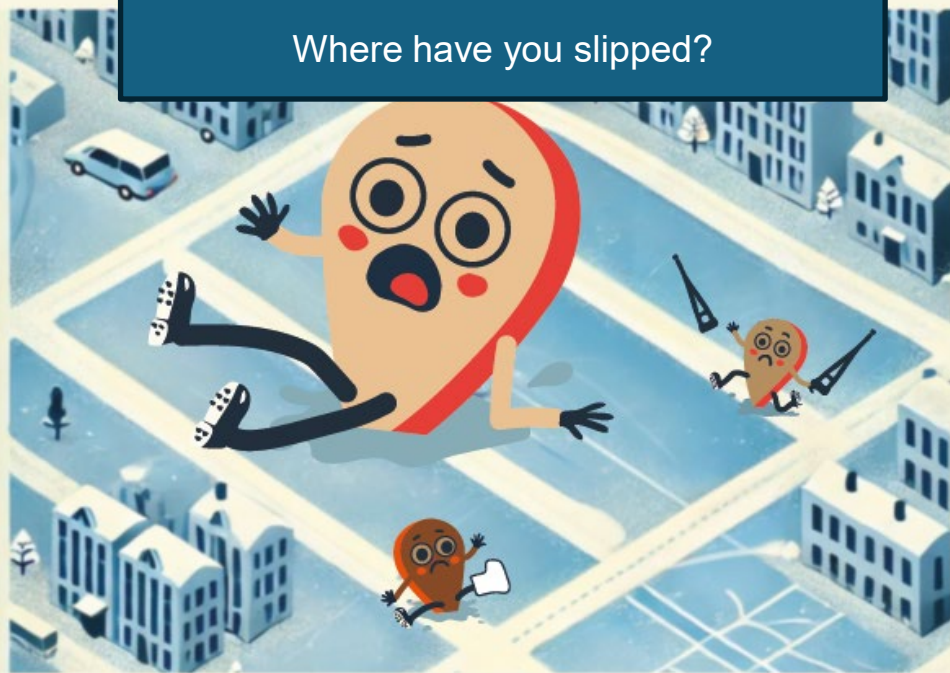


1. Funding to prevent falls in outdoor areas



**Fortell oss:
Hvor har du sklidd?**

Where have you slipped?



**Scan QR-koden og fortell
oss hvor du eller noen du
kjenner har sklidd, så det
ikke skjer igjen.**

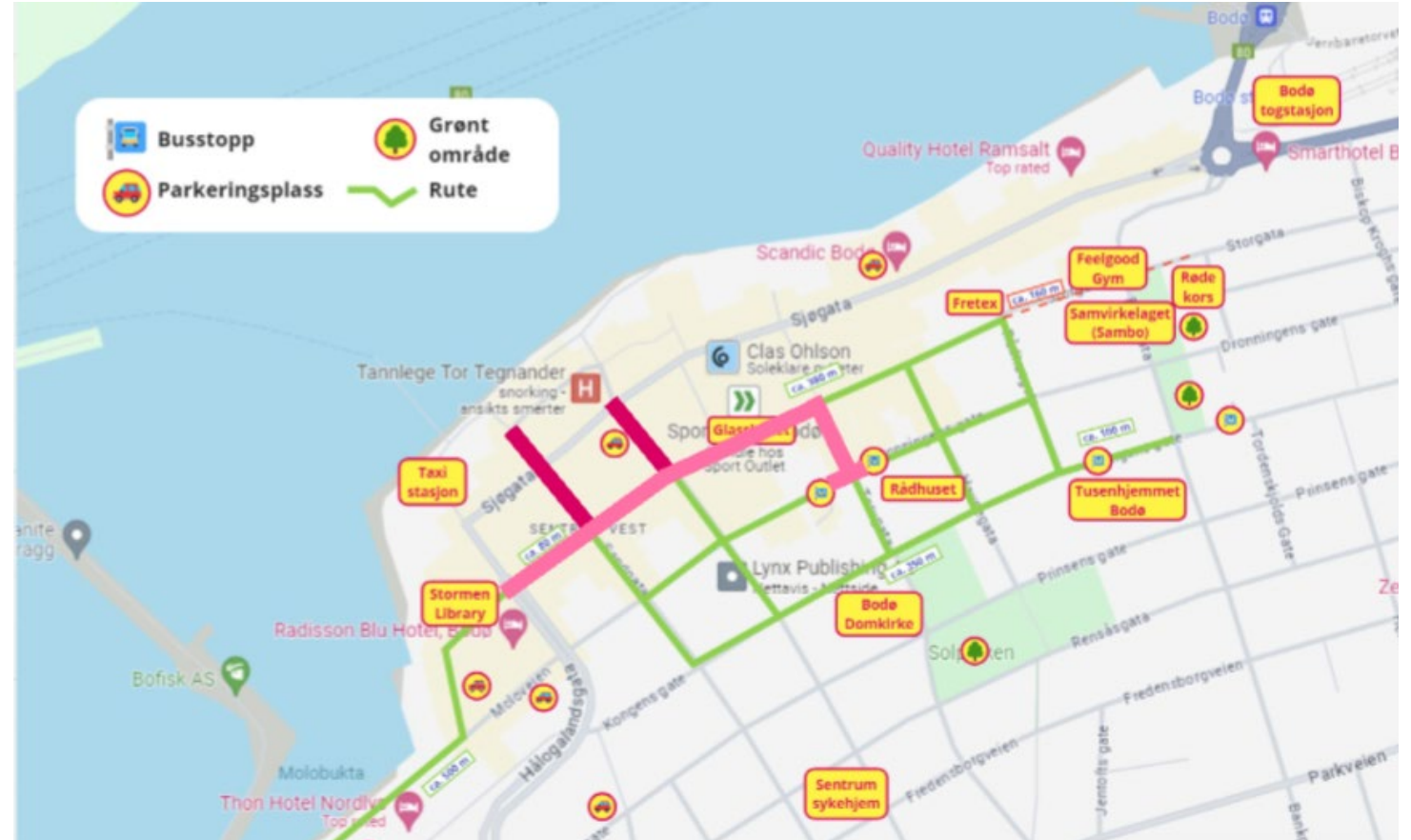
Eller bruk: <https://arcg.is/9Pnnj>



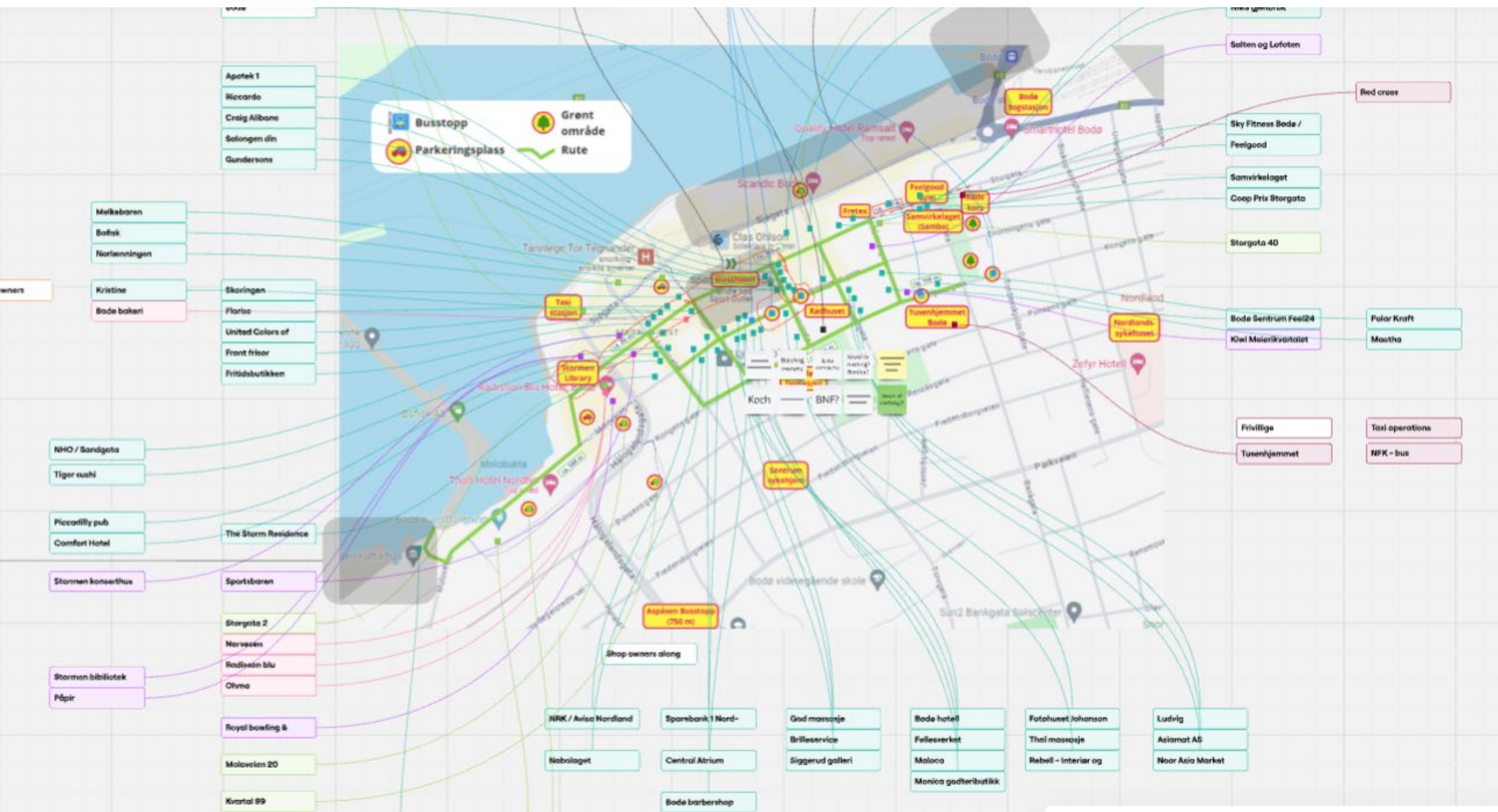
Støttet av: **SAMFUNNSLØFTET**
SpareBank 1 Nord-Norge

2. An age-friendly route?

- Working with the target group(s) to identify important places in the city centre
- Aiming to build a connected route that ensure an accessible circuit, connecting important places
- And... Engaging all the stakeholders along the route to collaborate.



There are a lot of stakeholders...



Dilemma

Age-friendly

Plow-friendly

**Over to the
NORA project**



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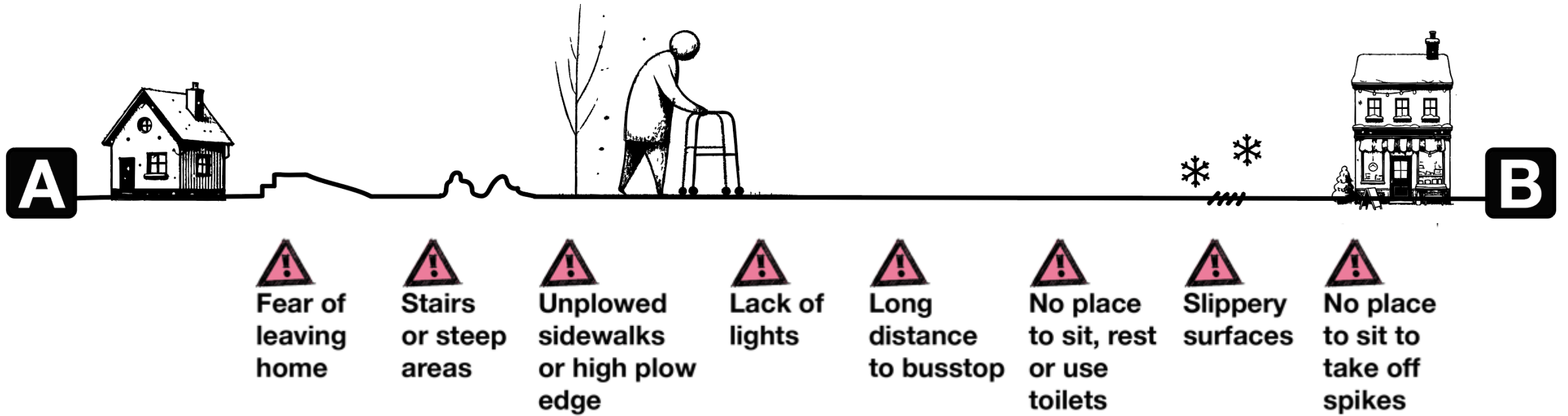
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Let's engage!

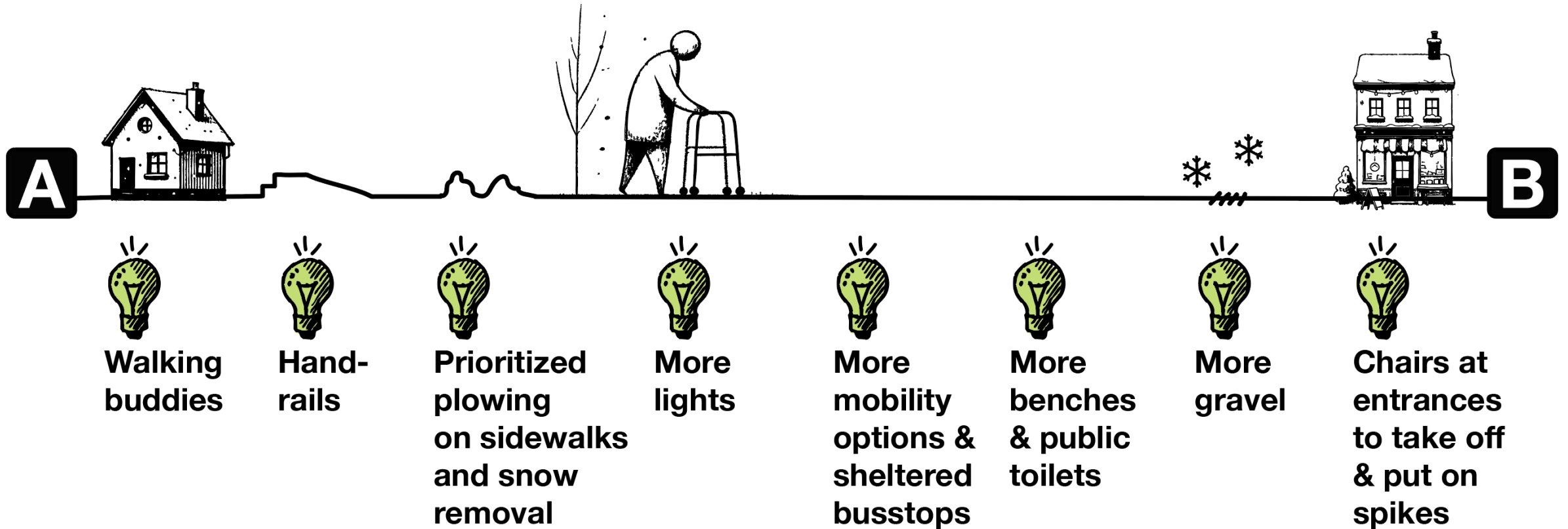
Interactive session to
**understand the problem, gain
ideas** and work towards more
age-friendly communities
together



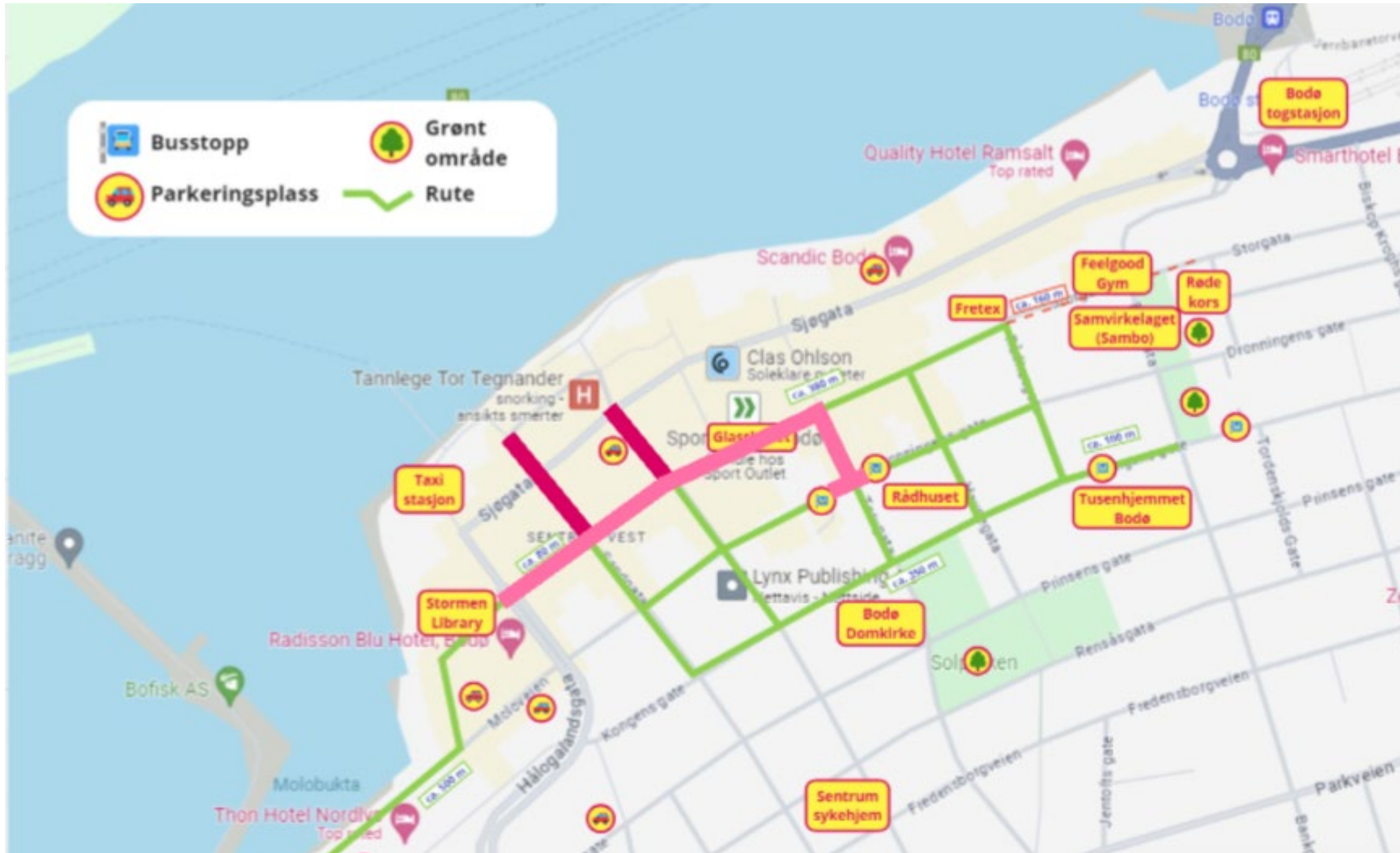
The challenge:



The ideal:



What do you think of some of the ideas?



Ideally, we would love to do this with you...



But we are instead moving to...

