RAMBØLL

Bright ideas.
Sustainable change.

Planning and designing for cycling

Ramboll cycling services overview

00 DATA & INSIGHTS

Surveys

Data collection & analysis

Cycling account

01 POLICY & REGULATION

Policy

Strategy

Action plans

SUMPs

02 PLANNING

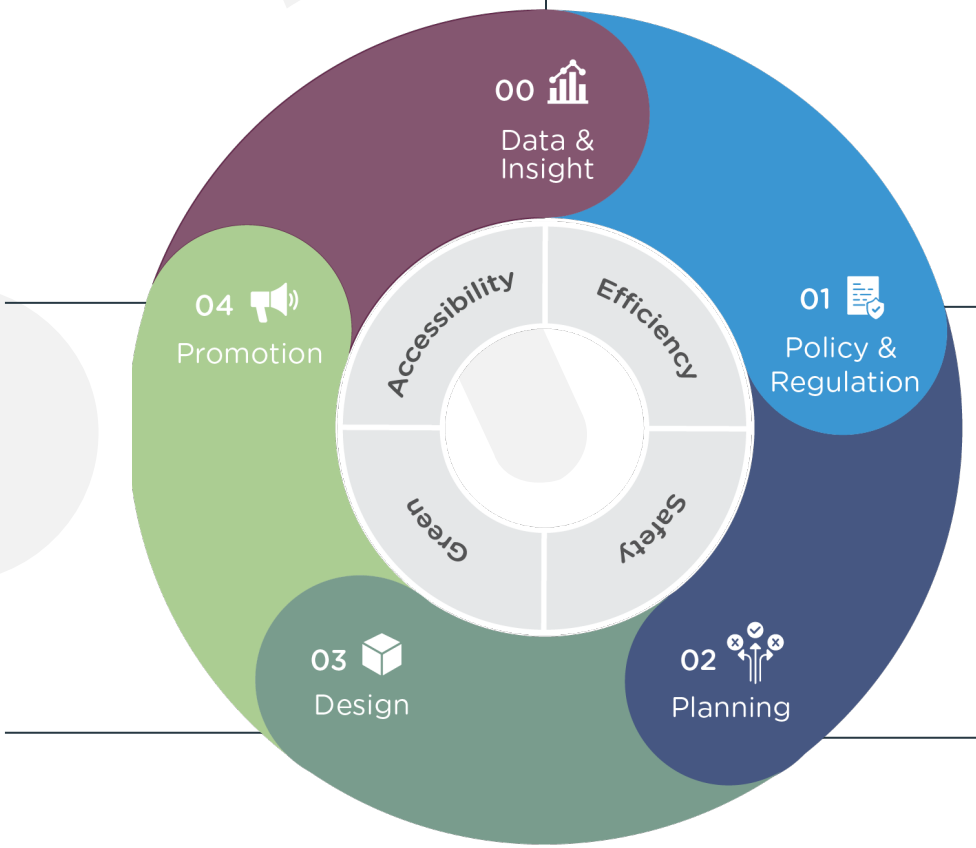
Urban planning

Network planning

Simulations

Modeling

Feasibility studies



04 PROMOTION

Stakeholder involvement

Promotion

Campaigns

Knowledge sharing

03 DESIGN

Conceptual design

Detailed design

Parking

ITS and signals

Signage and wayfinding

Integration with other modes

00 Data and insights

References

00 Data and insights

Access to **good data** and insights are important in order to plan for the right measures. Questions that needs to be answered are for example ‘Where do people bike?’, ‘How much do people bike?’, ‘What is the state of the existing infrastructure?’ and ‘What do the citizens think?’.

To be able to see and evaluate different aspects it is also important to **combine quantitative methods and data with qualitative methods** like interviews and focus groups.

Some examples of services Ramboll offers for this phase are:

- Advanced bike flow analyses using cameras, drones or wifi
- Analysis of vehicle speeds from GPS-data
- Traffic accident analyses
- Surveys and interviews
- Road surveys and maintenance studies
- Bike accounts and BYPAD audits

Walking and cycling data - Practice, challenges, needs and gaps

The challenge

Unlike cars, public transport, and new mobility solutions data on pedestrians and cyclists is not systematically collected, has limitations and can be difficult to compare and benchmark. But data on walking and cycling is important for cities in order to set goals and targets, create the policies needed to reach these goals, to track progress and make decisions about investments in infrastructure and planning measures that support walking and cycling. Lack of data also means that walking and cycling is often missing or overlooked in the transport and mobility ecosystem – because what is not measured does not count. Often pedestrians and cyclists only become visible in data when they get hurt or die in accidents. Lack of data also means lack of knowledge about why different people are not walking and cycling – at all or in specific streets or areas. Data is put simply a way of creating awareness and making the invisible visible.

Our approach

Through surveys and interview se investigated how 18 public authorities practise, needs and challenges in relation to walking and cycling data and benchmarked the available data sources against the most common indicators.

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Bicycle account

Bicycle account 2019-20 – City of Aarhus

Challenge

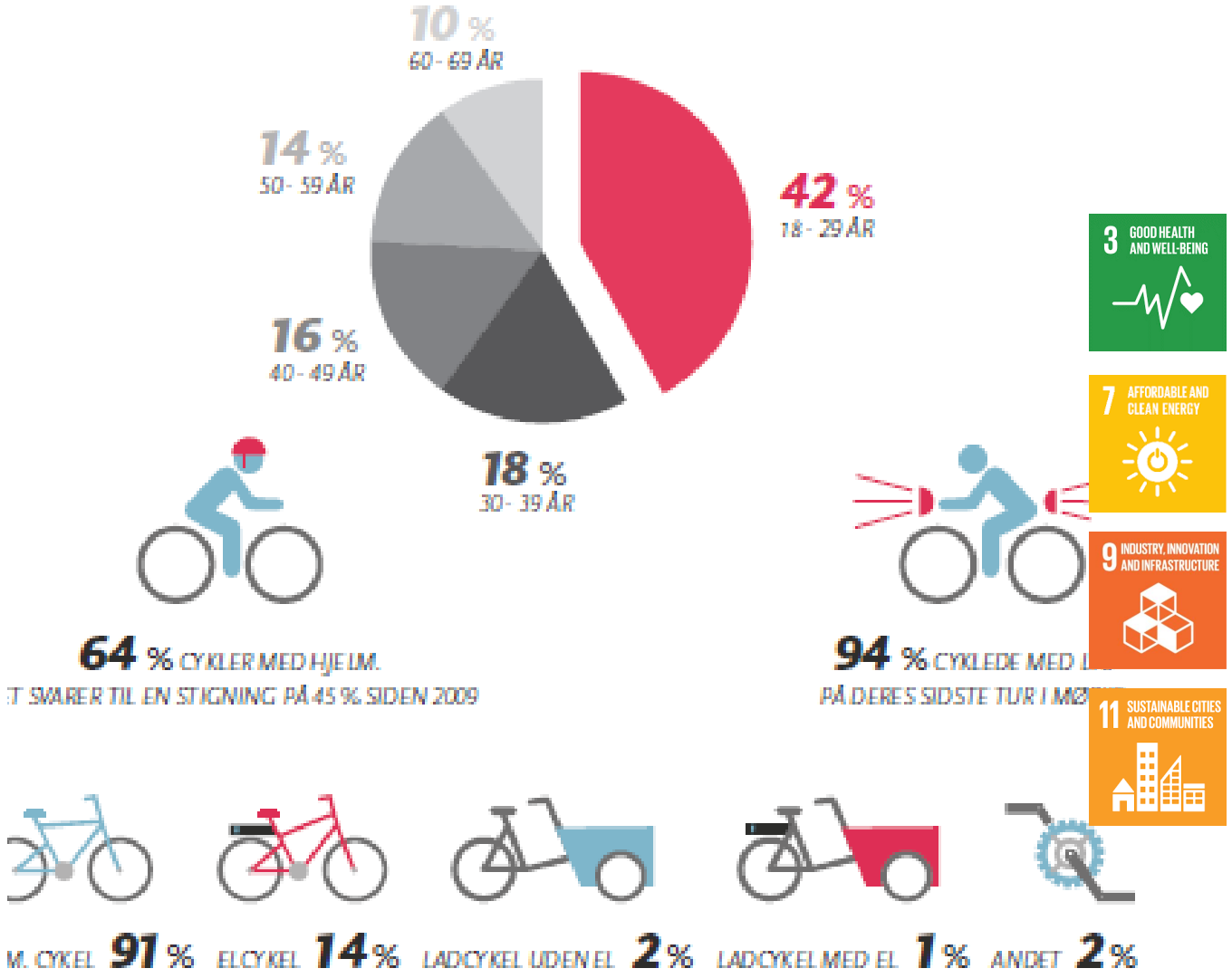
Since 2009 the City of Aarhus has biannually collected data on a broad range of cycling indicators to benchmark how they were doing – both in regards to their own goals and in relation to other cities. The are approaching the end of of their strategy periode.

What we did

- We collected and analysed cycling data on infrastructure, parking, accidents etc. and carried out survey of children's transport to school and citizen's survey on behaviour and satisfaction. All data was then disseminated graphically and benchmarked with the city's goals in a report.

Effect

- The bicycle account was presented and accepted by the local politicians and will serve as starting point when the city set targets and develops new goals for cycling and mobility in the city.



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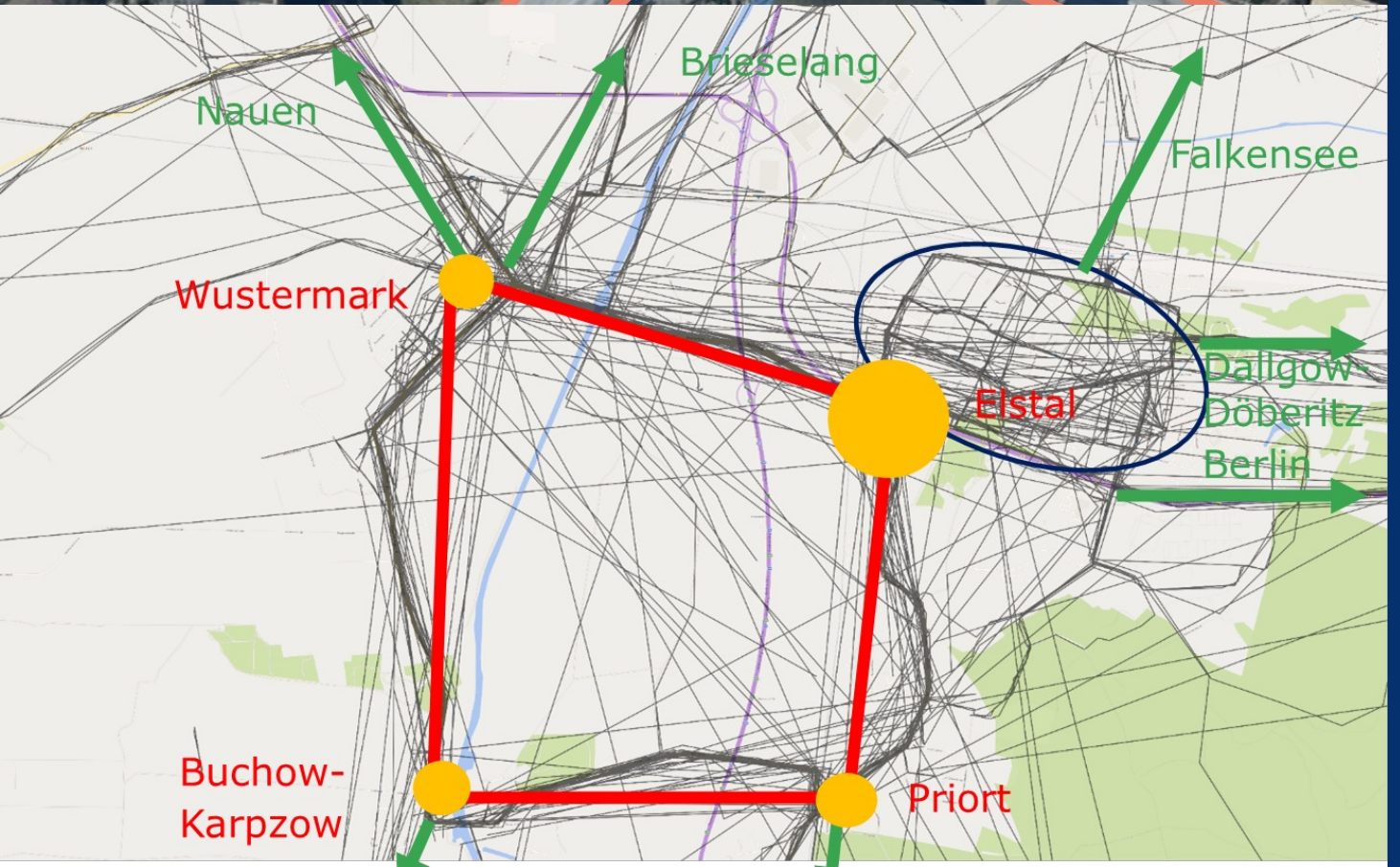
SUMP Lübeck

- Description: The Hanseatic city of Lübeck wants to improve sustainable modes of transportation. Ramboll develops a SUMP including detailed studies
- Project Manager: Gerald Hamöller, Torsten Perner (DE)
- Client: Lübeck municipality
- Scope:
  - SUMP (Sustainable Urban Mobility Plan) – main concept
  - Light Rail pre-feasibility study
  - Cycling concept
  - Parking
  - EV charging
- Delivery period: 09/2022-03/2024
- Ramboll Business Units: Ramboll DE



Ramboll Transport

Cycling Concept Wustermark

- Description: The municipality of Wustermark, 15 km west of Berlin, is growing significantly not least by several commercial locations. By now passenger traffic has mainly relied on car. In order to create an attractive alternative, Ramboll has developed a comprehensive cycling concept.
- Project Manager: Torsten Perner (DE)
- Client: Wustermark municipality
- Scope:
  - Communication, participation and stakeholder management including online-campaign with maptionnaire
  - Network planning improving not only the connections in the municipality as well as to Berlin, Potsdam and Nauen
  - Redesign of selected streets and intersections
- Delivery period: 01/2020-07/2021
- Ramboll Business Units: Ramboll DE, SE, RMC

TRAFFIC SAFETY STUDY ON TWO WAY CYCLING ON ONE WAY STREET

CHALLENGE

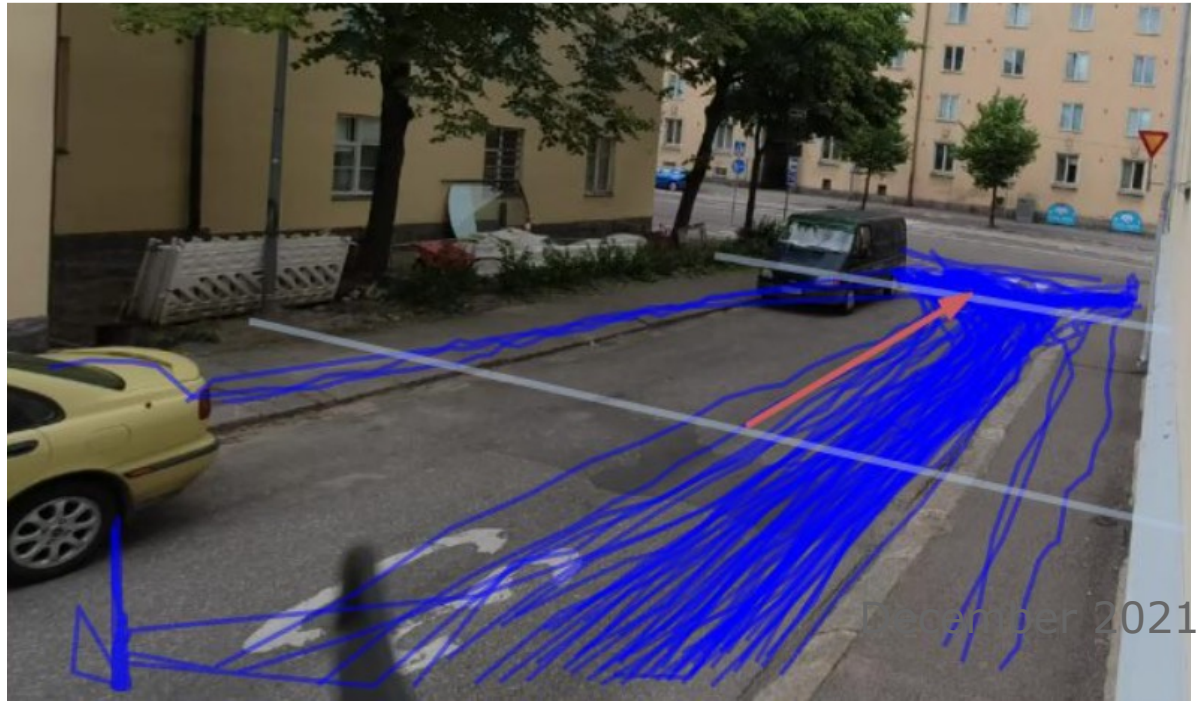
Allowing two way cycling on one way street has recently been added to Finnish legislation. There is very limited data and information available on this traffic solution. One of the key questions was; is the bicycle lane needed in the beginning and in the end of the segment?

WHAT WE DID

Ramboll used the machine vision to survey and visualize the use of the recently added traffic solution before and after marking the bicycle lane. We could determine the car drivers and cyclists driving and riding position, moving directions and possible safety problems.

EFFECT

The survey will help to understand people's behaviour on street and planning the safe solutions. The results will help to determine the right solutions in the street planning manuals.



Bicycle tourism in Germany

- Description: Cycling tourism has been booming in Germany over the past 10 years. The Road Directorate in Denmark wanted to learn more about what is being done in Germany and look into what could potentially be implemented in Denmark and asked us to map cycling tourism in Germany – how is cycling tourism organized, which stakeholders are involved, who are the cycling tourists and what do they want.
- Project Manager: Marianne Weinreich (DK)
- Client: The Road Directorate
- Scope:
  - Desk research
  - Interviews
  - Report
- Delivery period: 10/2022-12/2022
- Ramboll Business Units: Ramboll DK & DE

International benchmark of knowledge and innovation in cycling for City of Copenhagen

The challenge

Cycling is decreasing in Denmark. City of Copenhagen wanted us to do an international benchmark of knowledge and innovation in cycling area. The benchmark cover 4 areas:

1. Cycle data
2. Academic research
3. Europeans knowledge centres for cycling
4. Innovative cycling solutions
   - Infrastructure solutions
   - Mobility services with a focus on cycling
   - Tools and methods for planning for cycling

Our approach

Our international team interviewed planners, academic researchers and collected over 300 innovative solutions from our international network.

The result

Benchmark report with results and a inspiration catalogue with 100 cycling innovations.

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Potentials and barriers for city logistics by bicycle

The Challenge

Business cases and benchmarking for delivering parcels by cargo bikes.

Our approach

Desktop research, stakeholder interviews and analysis of parcel delivery data from a parcel distributor company.

The result

Increased knowledge and public awareness of potentials and barriers for parcel distribution by cargo bike.

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