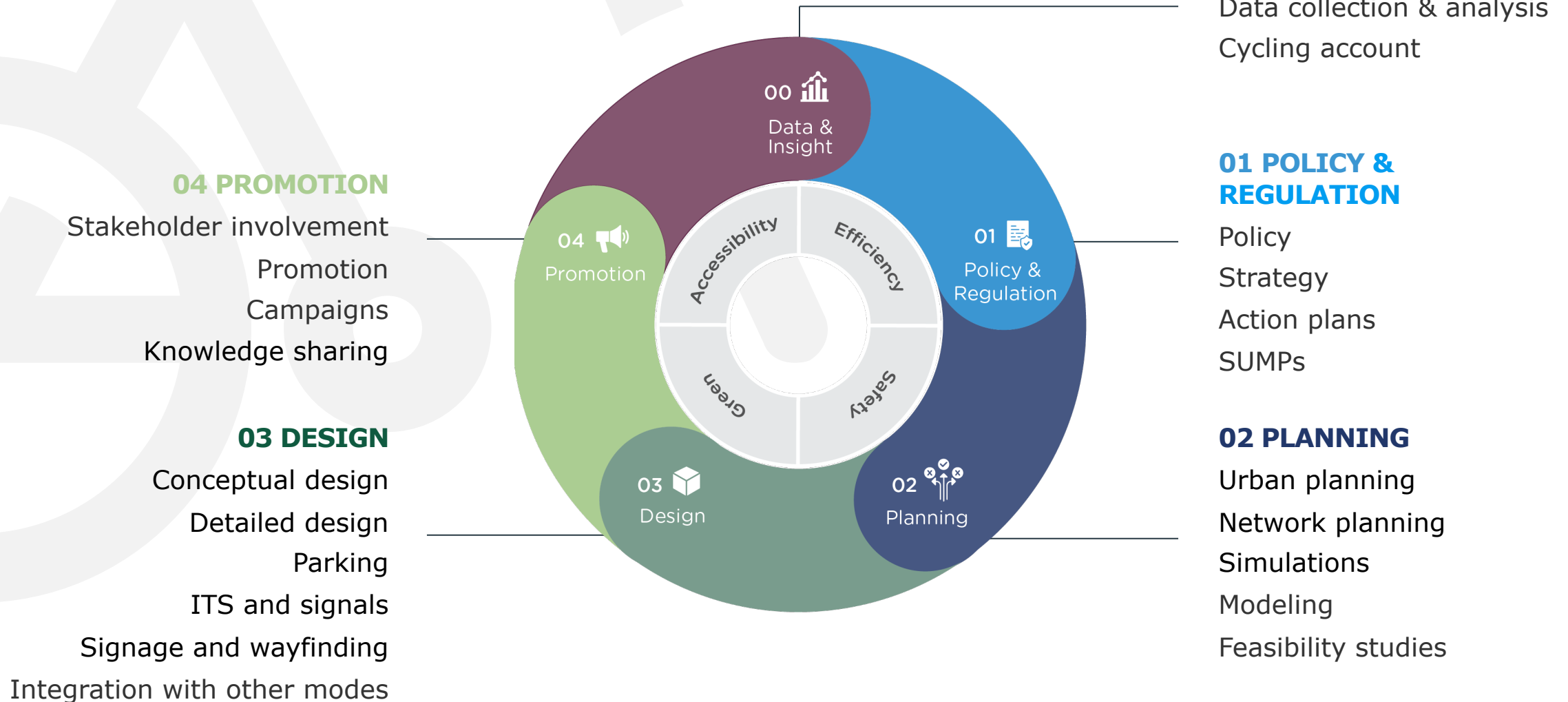


Ramboll cycling services overview



02 Planning

References

02 Planning

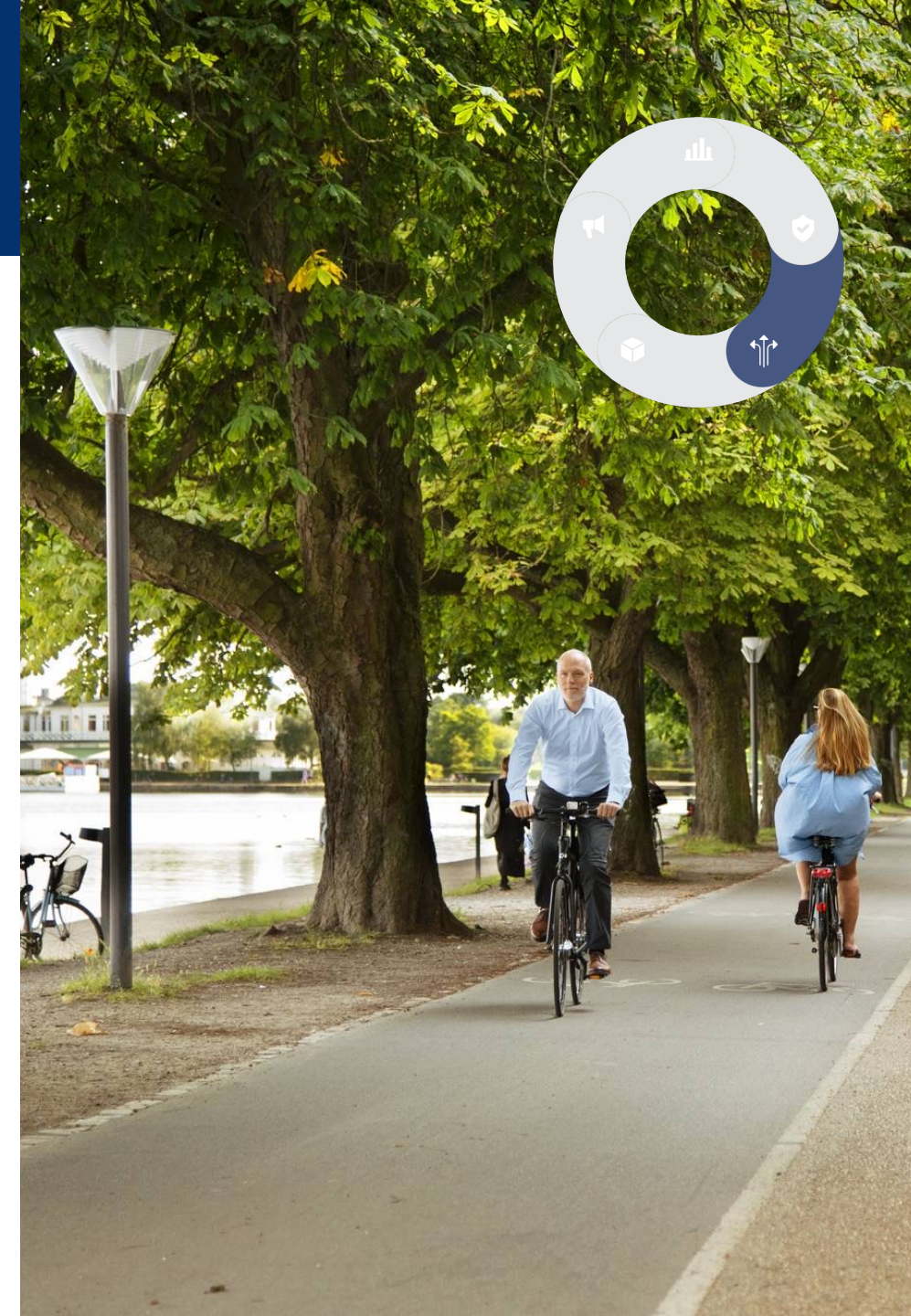
A **coherent, accessible, safe and secure network of bike lanes**, paths and bicycle streets is the backbone in a cycling city.

But planning for cycling is more than planning new bike paths, bridges and tunnels. It is also about land use and spatial **planning for a city with shorter distances** and planning for the **integration and connection with other modes of transport**.

Understanding of the **DNA of cycling** and **cycling culture** is crucial when planning for cycling. A bicycle is not a small car and cyclists are not pedestrians on wheels.

Some examples of services Ramboll offers for this phase are:

- Modelling and simulations
- Potential studies
- Feasibility studies
- Master planning
- Network planning
- Safe school routes
- Cost-benefit analyses, socio economics
- Traffic safety analyses
- Bike sharing studies



BRUTUS

Cycling flow analysis

Challenge

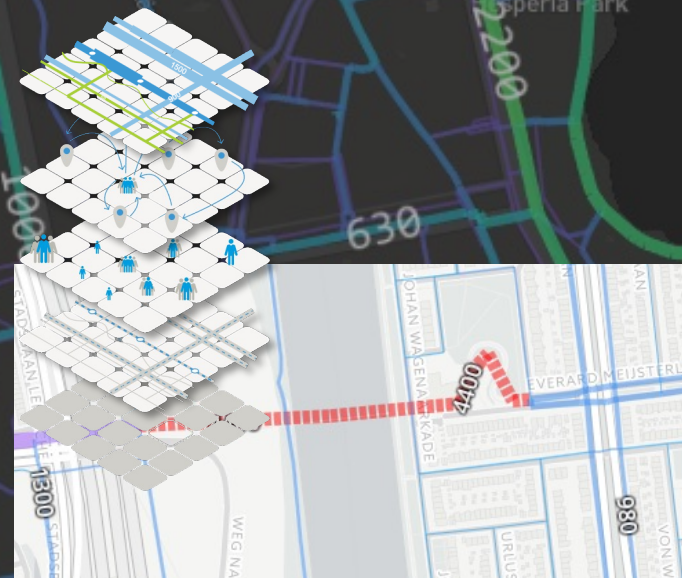
For modelling short trips like cycling and walking, one needs a high spatial resolution and detail in the description of urban structure and transport system, and it is important to take individual traveller characteristics into account.

What we did

Brutus is therefore very suitable for such scope with its high-density grid and individual-level approach. Therefore, there is a special class of Brutus models that focus on cycling and walking.

Impact

Travel demand is still modelled as multi-modal to get the modal shares to the correct level, but close attention is been paid to the bicycle network and route choices.



The Dafne Schippersbrug connects Utrecht's new district of Leische Rijn with the historic city center. Brutus correctly estimated the user potential of the bridge. A fact that was revealed by the automatic counters after opening.

RAMBOLL

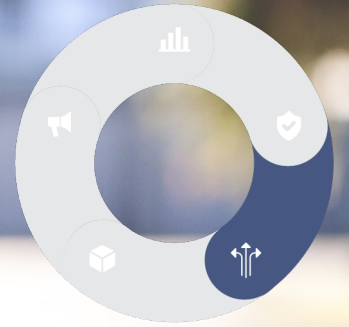
Viasmart

Challenge

VIASMART is the leading tool for road safety assessment. It is used by over 150 Finnish municipalities and governmental authorities to assess road safety and estimate the need for school transport.

VIASMART is a method for optimizing routes and assigning risk indexes to roads and routes based on road data and factors based on human behaviour. VIASMART makes risks visible and promotes walkability.

VIASMART is versatile and has also been used in urban planning, traffic improvement projects as well as risk analysis and to support Vision Zero initiatives.



Hermes

AI Supported traffic safety planning platform

Answers:

- At which areas is the traffic accident risk high for vulnerable road users?
- Why is a certain area safe or unsafe for cyclists?
- What could be done to improve safety for cyclists on this road or intersection?
- Is the design of this cycling infrastructure following the recommendations in the design guideline?

Description:

- Safer road environments by showing and explaining dangerous locations based on real-world data and expert knowledge
- Hermes combines a wide range of different data about the road network, the environment, design guidelines and expert input to highlight and explain the risk for traffic accidents on every road, intersection and pedestrian crossing in the road network.
- Hermes helps traffic safety experts, mobility engineers and urban planners understand where and how to design safe traffic environments. They can work more efficiently by having all relevant data in one place, gain better understanding of traffic accident risks in an object, data driven way and make more effective and just decisions on which measures to implement.



Münster, Germany

Bicycle Network 2.0

Challenge

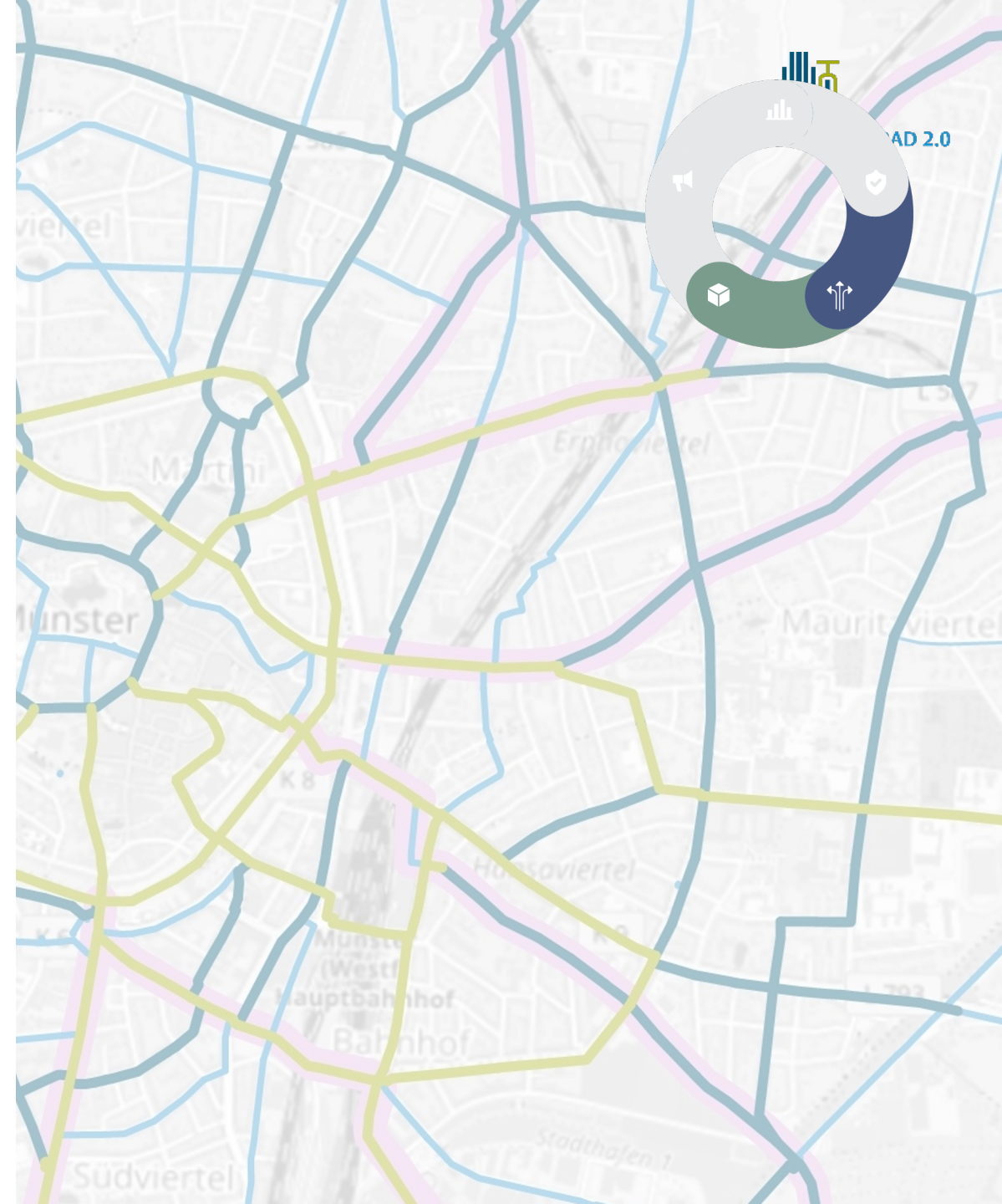
The City of Münster (315,000 inh) has one of the highest modal share of cycling in Germany (40% of all trips). To further increase this share and to improve conditions for cycling a coherent and hierarchic network of cycling infrastructure has to be developed including intermodal connectivity.

What we did

- Network planning using Brutus including a tracking campaign to determine the most utilised routes in 2035
- Communication, participation and stakeholder management
- Recommendations and redesign of streets and intersections

Effect

- Hierarchic network giving clear priorities for further infrastructure development
- High and positive public awareness for an improved bicycle network



Jägersro, Malmö

Planning for the kind city for children

Challenge

The old horse racing arena in Malmö will move and the intention is to create the most sustainable residential area in the Nordics with 5000 housing units on the grounds. Aside from the arena, the area today is dominated by large car parking areas, car dealers and a shopping center.

What we did

Three teams were selected to develop a structural plan for the area. Ramboll services in the competition team included mobility planning and sustainability coordination.

Effect

Our team (Ramboll, Kanozi architects and Mareld landscape architects) delivered a proposal centered around the concept of a 'kind city for children' where mobility is focused on walking and cycling. This concept was implemented in everything from mobility to the design of front yards.



Växjö Sweden

Potential for sustainable mobility

Challenge

Calculate and visualize the potential for sustainable commuting to work and school in Växjö municipality.

What we did

From demographic statistics and data on the road network and public transport supply we used GIS to calculate how many citizens that potentially can bike or travel by public transport to work and to school. This was visualized in an interactive web map that shows potential commuting routes as well as areas with certainly good or bad accessibility by bike or public transport.

Impact

The analysis and the results are, together with a transport model developed by Ramboll, used as a basis for traffic planning and planning of mobility management measures in the municipality. The client also plans to use the results in their communication and campaigns.



Berlin Routes

Feasibility study of 6 cycle superhighway routes in Berlin

Challenge

Establish an easily recognizable and coherent network of cycle superhighways within Berlin.

What we did

Feasibility Study for 6 of 10 prior cycle superhighways in Berlin ~ 80 km corridor length.
Conceptual and detailed design for the 6 cycle superhighways.

Effect

- Cycle Superhighways as a game changer for urban space.
- Intensive and continuing coordination with client, stakeholders and the public.
- Establishing high planning standards and design.



Possible other examples DE

- Cycle super highway Wiesbaden – Mainz (feasibility study), linking 2 German capitals with 0.5m inhabitants

