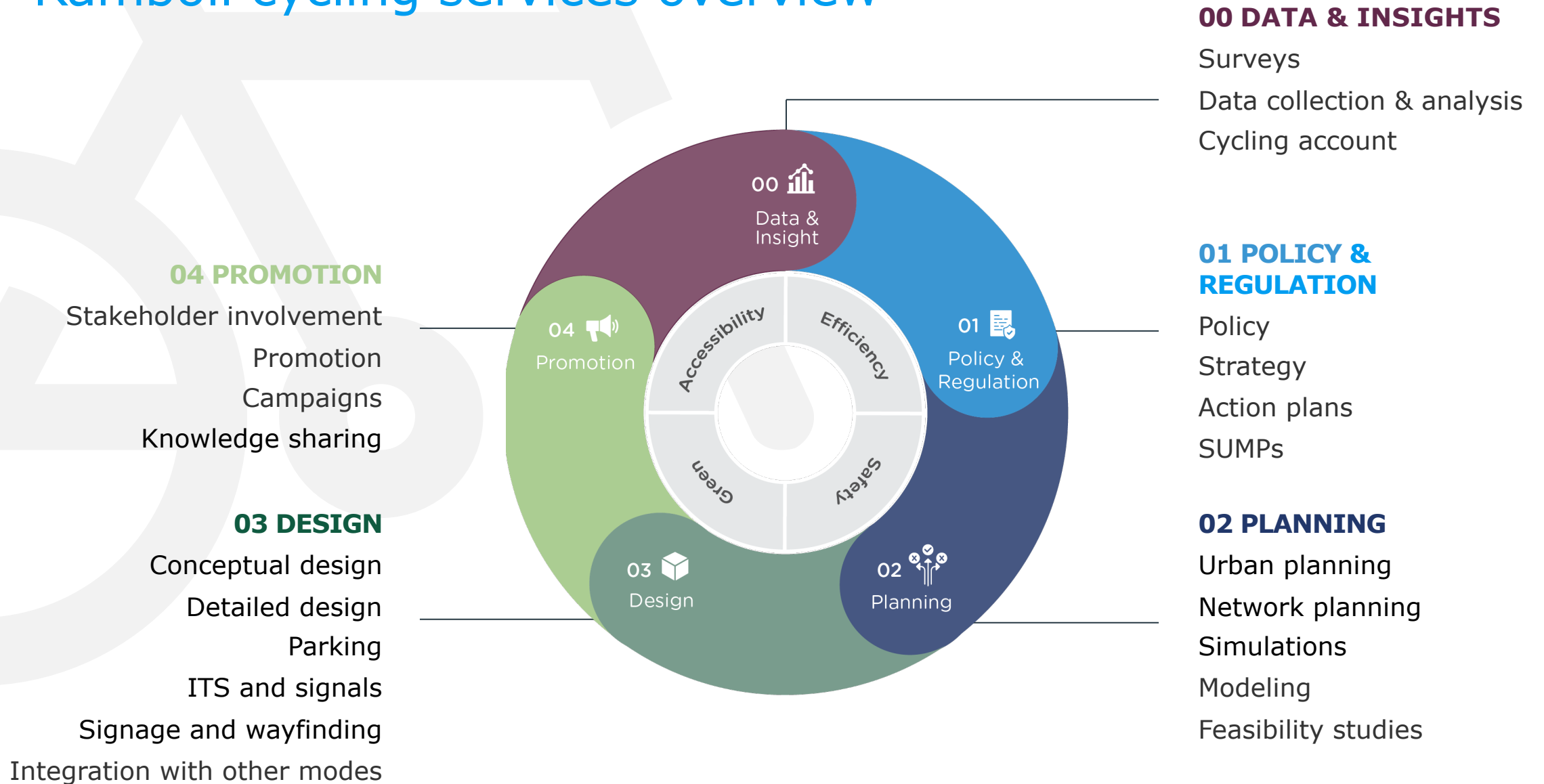




Bright ideas.
Sustainable change.

Planning and designing for cycling

Ramboll cycling services overview



03 Design

References

03 Design

When designing cycling infrastructure we always use our experience and **best practice from the Nordics, Germany and the Netherlands** and adapt this to the **local context and the local cycling culture**.

Ramboll also have expert knowledge in street design, intelligent transport systems (ITS), ground engineering, landscape architecture, climate adaptation and stormwater handling. This means that we can **take care of the whole design phase, from conceptual and principal design to detailed design**.

Examples of services for this phase are:

- Conceptual design
- Design manuals
- Detailed design
- Bicycle parking
- ITS and signals
- Wayfinding and signage
- Urban and landscape integration
- Climate resiliency and adaptation



Planning manual

National design manual for bicycle traffic

Challenge

In order to reach the set goals for bicycle traffic, a significant improvement is required for bicycle infrastructure in Finland. The low standards of planning have limited the growth of cycling for decades.

What we did

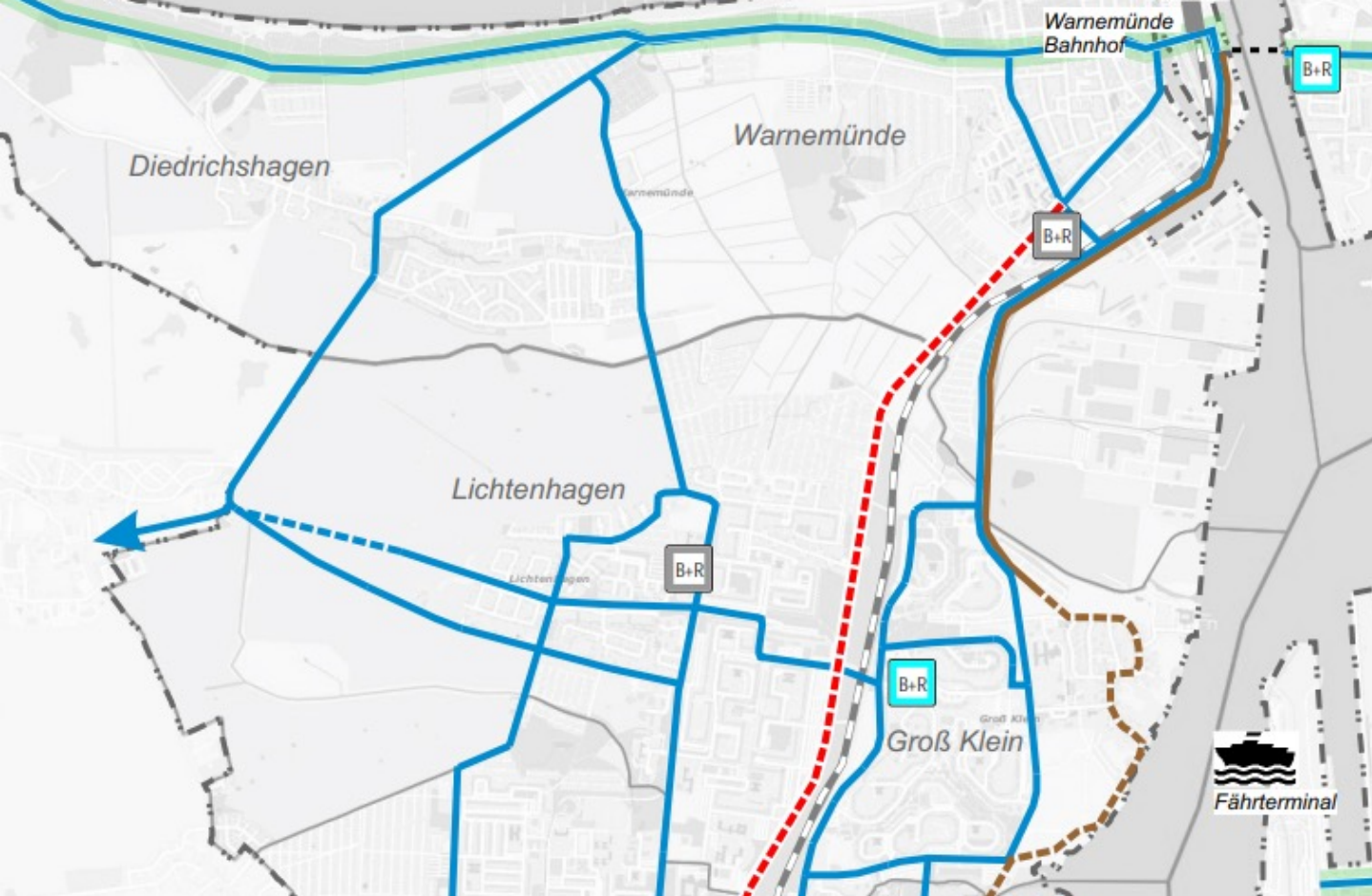
We wrote the manual from A to Z in order to set the necessary planning principles and introduce some new traffic arrangements. The manual content is following the best practices in the world and fit them in the local context.

Effect

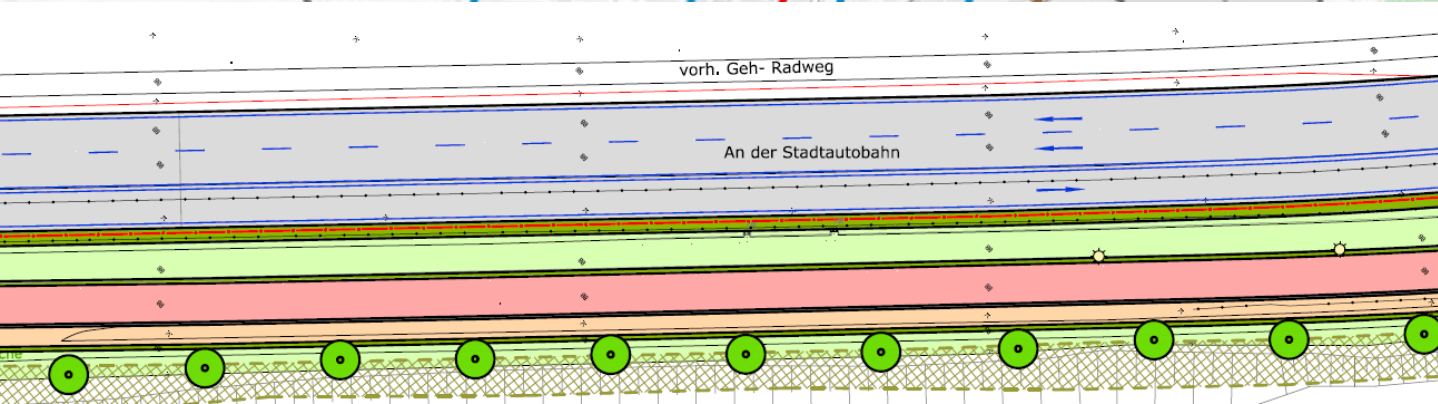
The new national planning manual represents the new era of bicycle traffic planning in Finland. Building bike paths with the new standards will take time – but most importantly, the page has turned.



Cycle Super Highway Rostock



- Description: Preliminary design for Cycle Super Highways Rostock-Lichtenhagen – Warnemünde by redesigning the existing urban motorway
- Project Manager: Torsten Perner (DE)
- Client: Rostock municipality
- Scope: Preliminary design
- Delivery period: 03/2021 - 07/2022
- Ramboll Business Units: Ramboll DE, DK, SE



Bicycle Snake

Attractive Urban Bicycling Connector

Challenge

Improve connectivity and reduce travel time and route distance for users of a heavily trafficked bicycle route bifurcated by a canal in central Copenhagen.

What we did

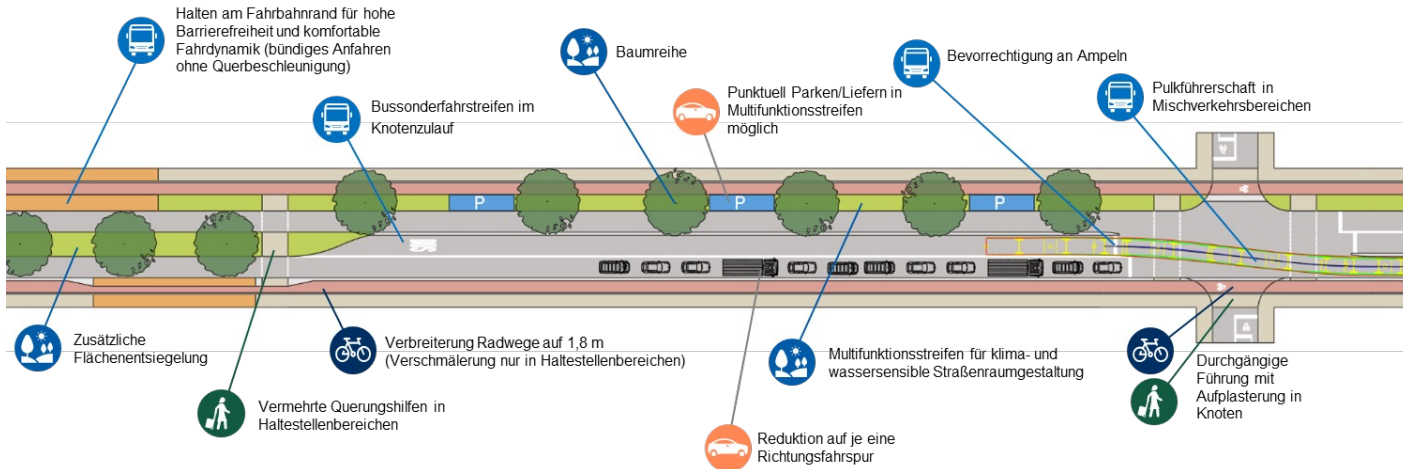
Prepared the project proposal, detailed design and tender materials, as well as fabrication and construction inspection.

Effect

The "Bicycle Snake" prioritizes connectivity, greatly increases the convenience of bicycling, and is a visually stunning example of people-focused infrastructure.



New street design

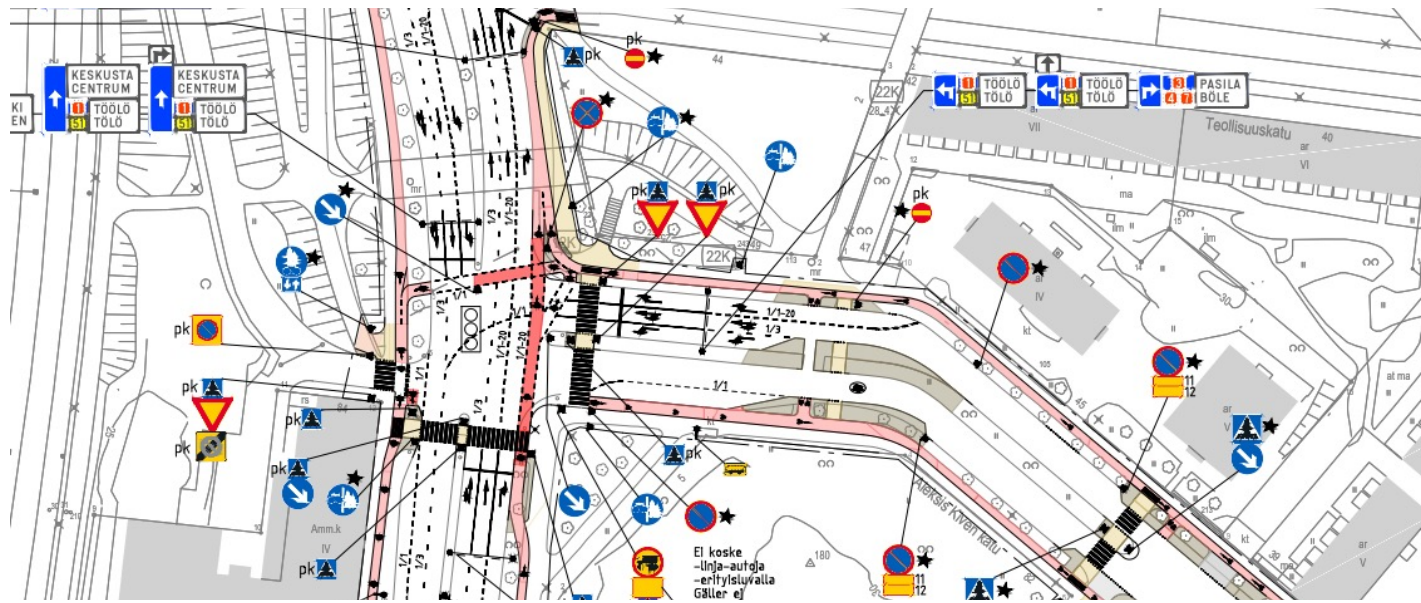


Online participation



Mobilplan 2035 Luruper Hauptstraße

- Description: Feasibility study for a Cycle Super Highway between the both capitals of federal states (together 0.5 Mio inhabitants)
- Project Manager: Torsten Perner (DE)
- Client: Hamburg municipality
- Scope:
 - Preliminary designs for the road space
 - Macroscopic simulation with Visum
 - Microscopic traffic analysis with Lisa+
 - Blue/green infrastructure and environmental planning
 - Participation with 3 stakeholder workshops, online participation and customer audits
- Delivery period: 12/2021-09/2022
- Ramboll Business Units: Ramboll DE, Henning Larsen, RMC



Bicycle paths with lightened and fastened design process

The challenge

Helsinki is in the middle of a transition from bidirectional network for cycling to unidirectional network. The transition will take a long time, and there are serious gaps in the network.

Our approach

Our team suggested for the city of Helsinki that on the selected existing bicycle paths there could decent arrangements found with lightened planning process in order to fasten the transition and make new unidirectional network cohesive. The general method was to change existing bicycle paths to unidirectional on the line segment using road markings and traffic signs while make constructural changes only in the intersections.

The result

The cycling target network was extended with approx. 5 km of new bicycle paths serving much better cohesion for cyclists.



Wayfinding

Wayfinding for bicycle traffic

Challenge

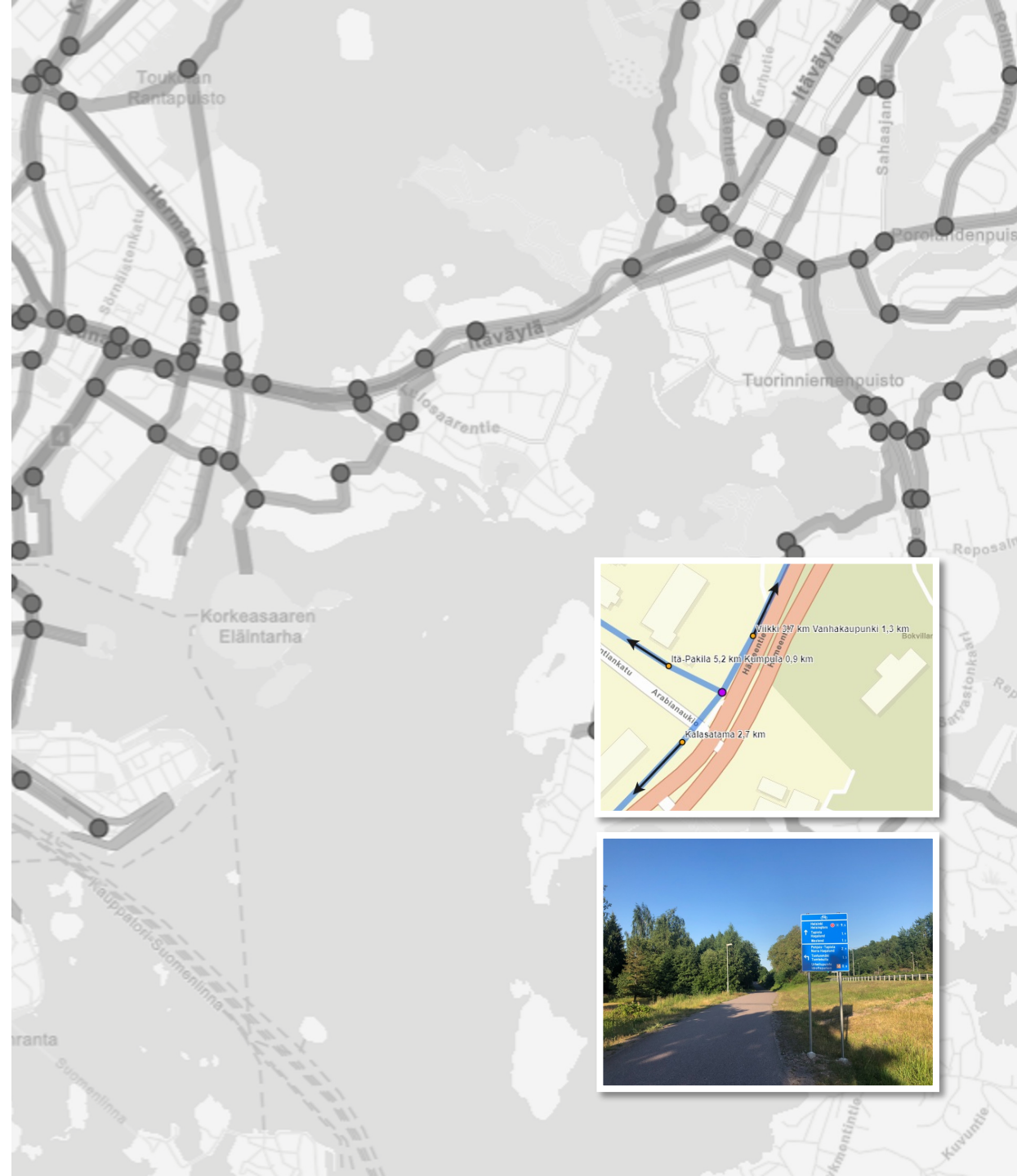
Bicycle paths are not always intuitive and easy to follow from A to B. To make cycling an attractive alternative for everyone, people need to find their way in the cities.

What we did

We created a GIS-based tool to determine the contents for wayfinding. The output is an error free and easily updateable general plan for wayfinding. The general plan is database for traffic sign contents.

Effect

We could deliver time saving wayfinding planning to our client. With new better signposting, more cycling can be expected as way finding get much easier for everyone.



Active School Travel

DLR (Greater Dublin), Ireland

Challenge

Unsafe conditions for children to walk and cycle to school as a result of car oriented suburban planning and street design from the past.

What we did

Designed a coherent network of Active School Travel routes with the safety concerns of families with children in mind, linking residential areas to 65 schools across the county.

Effect

Enabled more children to walk and cycle to school, and help to change the perception of cycling in DLR County.

