

Cycle Superhighways in NRW ... ride, ride, ride ...

Cycle Superhighway all directions



Dear Citizens,

The benefits of cycling are manifold: cycling is friendly to the environment and roads, costs little, boosts health and is also fun! As pedelecs, bicycles also represent a genuine alternative to the car for longer distances and older people.

This is why here in North Rhine-Westphalia we need an extensive, safe cycling network of the highest standard. The premium product for cycling is Cycle Superhighways – wide, comfortable routes that significantly reduce travel times in and between towns and cities. In NRW we are taking the lead and building seven large Cycle Superhighways – and the first kilometres are already open to cyclists.

Paramount among these is the Radschnellweg Ruhr RS1: over 100 km of Cycle Superhighway in the heart of NRW and right through the Ruhr region.

This will connect the towns and cities of the Metropole Ruhr, their universities, companies and approximately 1.7 million



people to one another, bringing them closer together.

With this brochure we want to explain to you in detail what Cycle Superhighways are - and the RS1 project in particular - and how they will change our mobility. I am sure that you, too, will be impressed by our new Cycle Superhighways!

Michael Groschek

*Minister for Construction, Housing,
Urban Development and Transport
of the State of North Rhine-Westphalia*

What is a Cycle Superhighway?

”The bicycle is a short distance mode of transport! Travelling further than 3 km in one go makes no sense for everyday journeys, and is not enjoyable for the cyclist.“ This was the prevailing attitude in the last century. Today we have come - and ride - a lot further. With the right cycle or pedelec technology and the right infrastructure, in the form of the Cycle Superhighway, a type of autobahn for cyclists.

The Association for Pedestrian and Bicycle-friendly Cities, Townships and Counties in North Rhine Westphalia (AGFS) has defined the term ”Cycle Superhighway“ as follows: Cycle Superhighways are high-quality, direct and capable connections between rural districts, municipalities and urban districts. They lead from A to B without excessive detours or turns. Without significant interruptions from junctions, as

fast and convenient as possible and, naturally, on a surface that enables a fast pace. They are therefore ideal for commuting, riding to the next town to visit friends in the evening, shopping in a neighbouring district – and of course for tourism.

Cycle Superhighways may take many forms: extra-wide cycle paths or marked cycle lanes as well as cycle routes. In all cases, a Cycle Superhighway transports cyclists over distances long and short with ease, including with the pedelec, reaching numerous destinations in comfort.

As a consequence, ”A 40 for cyclists“ is already used to refer to the RS1 from Duisburg to Hamm. The stretch between Mülheim an der Ruhr and Essen is already completed: you can try it out for yourself!

Mobility in the future – not without Cycle Superhighways!

Congested city centres, traffic jams and stress on roads and highways. The road network, but also many bus and rail routes, are overloaded – the daily misery of traffic. In addition, environmental pollution, noise and other issues are further downsides to travelling by car. Cycle Superhighways can bring us much further here!

A strategically-connected network of Cycle Superhighways can relieve the burden on roads. At the same time, completely new mobility options arise, for example for commuters. Because many commutes are short: today, although 60 % of commuters travel by car, half of them only travel up to 10 km – a perfect distance for cycling!

The fact that few people cycle in spite of the short distances is not down to laziness, but to infrastructure: it is seldom possible today to make fast, safe progress

on cycle paths. Many are unsafe, poorly maintained or result in diversions. Where good cycle paths exist there are already far more cyclists using them – an indication of the future success of Cycle Superhighways.

Electricity is also helping to make Cycle Superhighways more popular: the combination of e-bike and Cycle Superhighway makes cycling even more potentially rewarding, convenient and speedy. More relaxed and healthier, too. The minimal effort required means that even a fast pace and long distances do not mean cyclists have to arrive having worked up a sweat, the radius is expanded.

By the way: one car driver in three is considering buying a pedelec ...

Cycle Superhighways – near, far, good!



Standards and facilities

The planning of Cycle Superhighways means that standards needed to be specified for the uniform quality of the routes. Neighbouring countries the Netherlands and Denmark already have experience with Cycle Superhighways. Their experience was used by the AGFS, the Landesbetrieb Straßenbau NRW and the NRW transport ministry to jointly develop their own criteria. This is how Cycle Superhighways are becoming the new premium product for cycle traffic:

- continuous separation of cyclists and pedestrians
- a minimum width of 4 m for structural cycle paths
- where possible, right of way and green traffic light sequencing
- few climbs
- signposting to NRW standards
- urban lighting
- organised winter services and cleaning

And this is not everything – or could you imagine a motorway without rest areas and service stations?

Exactly. Service points are equally important for Cycle Superhighways: at intervals of a few kilometres they offer a fixed pump and key tools for minor repairs. Rest areas are a good idea at junctions with other Cycle Superhighways or with long-distance tourist cycle routes.

These include bike parking areas, shelter for cyclists, a charging station for pedelecs, seating, drinking water and toilets.

At central stopping points and interfaces for switching between bike and train cycle stations or even mobile stations can be provided – with a full range of services for cyclists: from guarded cycle shelters to on-the-spot repair services or snack options.

PS: Would it surprise you to learn that 30,000 people a day use cycle routes such as these, for example the Norrebrograde in Copenhagen? Quality is key!

Route 66 for cyclists

Have you always wanted to be able to cycle fast and safely? Cycle two abreast and overtake, finally put the new pedelec through its paces, travel easily over a long distance? Do you want to get to another part of town quickly, from the suburbs to the city centre, or a neighbouring town? Are you one of the 74 % of working people who take less than 30 minutes to get to work? And have you always longed for a "Route 66" to cycle on in your spare time

and on holiday? Cycle Superhighways satisfy all of these different requirements – locally and in the region. And this is what makes them the perfect alternative to crowded motorways, buses and trains.

In other words, Cycle Superhighways are for cyclists what motorways, trunk roads and country roads are for car drivers: fast, safe and convenient transport links – as well as being urgently required!



Photo: Rasmus Hjortshøj – COAST-Studio



Photo: P3 Agentur

Cycle Superhighways – a topic worldwide

Fast cycle routes are a successful development. The Dutch were already trying their "Fietssnelwege" in the 1980s. For years now, cyclists have been able to travel freely over long distances here. For example on the F35 between Enschede and Almelo: at least 4 m wide, it runs parallel to the motorway and the railway. The other Benelux countries as well as Switzerland, Norway, Great Britain and even the United States all feature role models for the German Cycle Superhighways. Many countries are now setting ambitious goals to increase cycle traffic.

In Denmark, for example: in Copenhagen the share of cyclists in traffic as a whole is already around 50%! One major reason for this is the system of "Cykelsuperstiers", or Cycle Superhighways. A total of 26 are planned, with many already in use. Similar to the spokes of a wheel, they lead from the centre of the city to the outer districts,

with around 100,000 commuting along them by bike every day. Short travel times are achieved not only via the well-developed, wide paths, but also green traffic light sequencing for cyclists.

The limits of car transport have by now become apparent to all. As a result, in recent years German towns and states have also begun to turn to the bicycle as a solution for regional and urban transport – and consequently the Cycle Superhighway.

Not just in NRW: in Göttingen, for example, the "eRadschnellweg" connects the main station to the northern campus of the university. Cycle Superhighways are also planned to link Nuremberg, Fürth, Erlangen and Schwabach, as well as the surrounding rural districts. A total of 80 projects are being planned throughout the country, with a total length of some 1,400 km.

Cycle Superhighways in NRW - we are investing in the future

Critics say we have no need for luxury cycle routes! This is true: what NRW and Germany need is an infrastructure for everyday use, with which we can utilise the enormous potential of cycle transport. In comparison: in Germany 10 % of all journeys are undertaken by bike. In the Netherlands it is 26 %, in Denmark 20 %. There is still a lot of room for improvement!

The expansion of cycle transport not only benefits cyclists, but all of us: it eases the strains on transport routes in general. Because we are not only creating better conditions for people who have always used their bicycles. With the cycling boom and the enormous potential of the pedelec people are discovering the bicycle as the transport of the future – whether it is for commuting, shopping, leisure or holidays. To be able to use the bicycle in a truly

efficient manner we need the matching infrastructure. The decisive leap in quality here is Cycle Superhighways – just look at our neighbours.

This is why we are turning to Cycle Superhighways here in NRW. This is why the subject of Cycle Superhighways is already a central component of the 2012 state government action plan to promote local mobility. On the basis of this, a Cycle Superhighway planning competition was staged in co-operation with the AGFS. As a result, awards went to:

- StädteRegion Aachen with a 30 km Cycle Superhighway
- Minden and Herford (36 km)
- Neuss, Düsseldorf, Langenfeld (25 km)
- Cologne and Frechen (8 km)
- RS2 in western Münsterland (45 km)

There are also further feasibility studies in NRW, for example for the "Central Ruhrgebiet" Cycle Superhighway.

This is intended to cover 16 km from Gladbeck via Bottrop to Essen.

Promoting cycling infrastructure is one of the cheapest ways to do something for the mobility of the future. The great significance of the Cycle Superhighways for the transport system as a whole led to the NRW state government amending the Straßen- und Wegegesetz NRW 2016, legislation covering roads and routes. Responsibility for building and maintaining Cycle Superhighways outside of cities with over 80,000 inhabitants is now also the responsibility of the state, not just the towns and municipalities. As a consequence, they enjoy the same status as state roads, as "state Cycle Superhighways". This



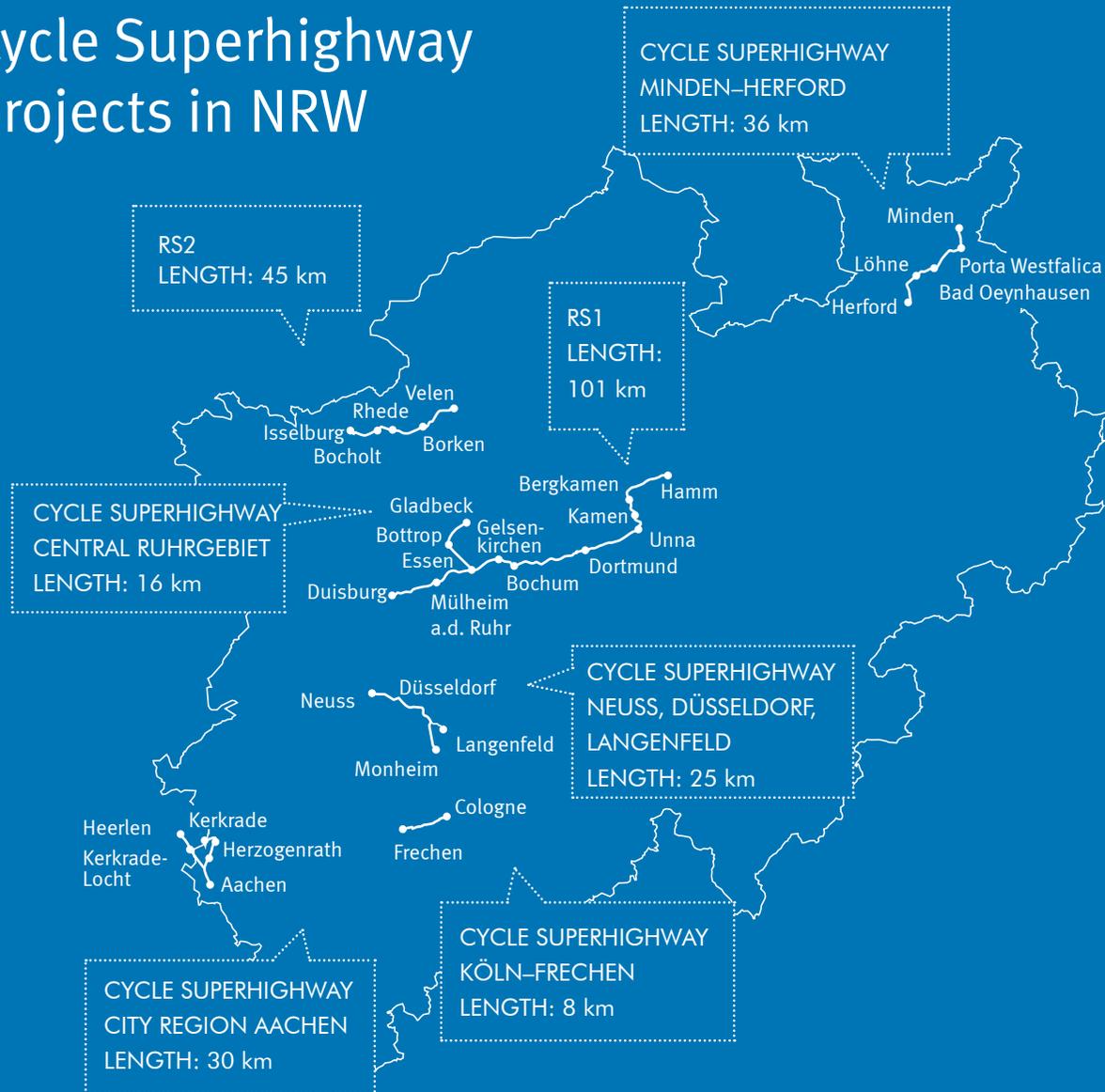
The documentation for the state Cycle Superhighways competition can be viewed at:

www.radschnellwege.nrw

underscores the value now placed upon them. In the coming years around 270 km of Cycle Superhighways are to be created in NRW.

We are certain: this is just the beginning!

Current Cycle Superhighway projects in NRW



Legal information

Ministerium für Bauen, Wohnen, Stadtentwicklung und Verkehr des Landes Nordrhein-Westfalen



Ministry of Construction, Housing, Urban Development and Transport of the State of North Rhine-Westphalia
Jürgensplatz 1
40219 Düsseldorf
www.mbwsv.nrw.de



Straßen.NRW.

Landesbetrieb Straßenbau
North Rhine-Westphalia
Wildenbruchplatz 1
45888 Gelsenkirchen
www.strassen.nrw.de

In co-operation with



The Association for Pedestrian and Bicyclefriendly Cities, Townships and Counties in North Rine-Westphalia
Von-der-Leyen-Platz 1
47798 Krefeld
www.agfs-nrw.de



Regionalverband Ruhr
Regionalverband Ruhr
Die Regionaldirektorin
Kronprinzenstraße 35
45128 Essen
www.metropoleruhr.de

3rd, revised edition, June 2017

This brochure can be ordered here:

- Gemeinnützige Werkstätten Neuss GmbH
Am Henselgraben 3
Fax: +49 (0) 21 31 / 92 34-6 99
E-mail: mbwsv@gwn-neuss.de
Please state the publication number V-538 when ordering.
- All AGFS publications can be ordered from their website, where they are also available for downloading.
<http://www.agfs-nrw.de/mediathek>
- Regionalverband Ruhr
The brochure can be downloaded from the website <http://www.rs1.ruhr/>

This brochure has been published in the scope of public relations work of the aforementioned partners. It may not be used by parties, canvassers or campaign workers during an election campaign for the purpose of canvassing. This applies to Landtag, Bundestag and municipal elections. Misuse includes, in particular, distribution at campaign events on information stands of parties as well as the insertion, printing or adhesion of party political information or advertising. Forwarding to third parties for the purposes of canvassing is also not permitted. Irrespective of when, in what way and in what quantity this text is received by the recipient, it may not be used in any way, including where there is no time reference to a forthcoming election, that may be construed as partiality of the state government in favour of individual political groups.

Concept and design:

P3 Agentur für Kommunikation und Mobilität
www.p3-agentur.de

Specialist support:
Planerbüro Südstadt

www.planerbuero-suedstadt.de

Title image: P3 Agentur / Ortlieb Sportartikel GmbH / ilshaim/photocase.de



www.rs1.rvr.ruhr



RS1
DER SCHNELLSTE WEG
DURCHS REVIER

RADSCHNELLWEG RUHR

Ministerium für Bauen, Wohnen,
Stadtentwicklung und Verkehr
des Landes Nordrhein-Westfalen



Regionalverband Ruhr

FOREWORD

The regional association Regionalverband Ruhr (RVR) has co-operated closely with the member cities, towns and districts over the past three decades to establish a regional network of cycling routes with a length of around 700 km, in the process making a key contribution to enhancing the quality of life in the Metropole Ruhr. The Ruhrtal-Radweg, the Römer-Lippe-Route and the Route der Industriekultur per Rad are three premium products here that are also marketed to tourists under the "radrevier.ruhr" label.

The planning and construction of a 101 km Cycle Superhighway from Duisburg to Hamm is a further key step in this direction. With the Radschnellweg Ruhr (RS1 for short) the aim is to create a high-quality, fast and safe cycling infrastructure for day-to-day cycling use, which satisfies the demands of the new mobility trends and represents a gain for the Metropole Ruhr.



In the direct 2 km catchment area of the Radschnellweg Ruhr there are currently 1.7 million people, 430,000 jobs and four universities with some 150,000 students. Each day the Radschnellweg Ruhr removes a daily burden of 52,000 car journeys from the streets of the Metropole Ruhr, reducing climate-endangering CO₂ emissions by 16,600 tonnes per year.

Cyclists can already experience the reality of the Radschnellweg Ruhr on the first completed section between the city centres of Mülheim an der Ruhr and Essen. We would like to invite you to experience for yourself the speed and safety of the future Radschnellweg Ruhr on this section.

The state government of North Rhine-Westphalia has supported and accompanied this project from its inception. The change in the network of roads and routes has set the scene for the realisation of Cycle Superhighways. The people of the Metropole Ruhr can now look forward to the RS1 and other Cycle Superhighways.

We are proud of the positive development and the country-wide effect that the Metropole Ruhr is bringing to bear with the Radschnellweg Ruhr!

Karola Geiß-Netthöfel
Regional Director Regionalverband Ruhr

Martin Tönnies
Head of Planning Regionalverband Ruhr

WHO IS INVOLVED IN THE RS1?

Since 2012 a supporting working group has been in place, with the following participants:

- Regionalverband Ruhr
- The cities of Duisburg, Mülheim an der Ruhr, Essen, Gelsenkirchen, Bochum, Dortmund, Unna, Kamen, Bergkamen and Hamm as well as the Unna district
- Federal Ministry of Transport and Digital Infrastructure, the state transport ministry of NRW, Landesbetrieb Straßenbau NRW (state highway construction), federal waterways and shipping administration as well as nature and cycling associations



Do you live in a conurbation? Do you use a car to get to work, your place of education, for shopping and leisure activities, and do you regularly find yourself in traffic jams?

What if ...

What if there was a faster, more economical, more environmentally-friendly and healthier alternative? What if, for example, you had your own "highway" for your bicycle, with no jams and disruptions? What if using a bicycle was **the fastest way** through the region?

After the experience of the "Still Leben" event on the A 40/B 1 in the scope of the Ruhr 2010 – European Capital of Culture, in which 3 million people used the autobahn through the region for alternative purposes, the idea of a new mobility

option in the region has grown: a Cycle Superhighway through the Metropole Ruhr! The fact that such a Cycle Superhighway is possible was clarified in a feasibility study carried out in collaboration with a large number of stakeholders and with the financial support of the Federal Ministry of Transport and Digital Infrastructure. Carried out between 2012 and 2014, the study defined a 101-km-long Cycle Superhighway passing through the largest German conurbation from west to east, largely free of junctions, from Duisburg to Hamm. 1.7 million people live in the catchment area of this Cycle Superhighway, dubbed the RS1.

WHAT FINDINGS DID THE FEASIBILITY STUDY REVEAL?



The findings of the feasibility study were as follows:

The RS1 is viable and a gain for the Metropole Ruhr!

The study also proposed a possible **route for the RS1** from Duisburg to Hamm. This proposed route was developed in co-operation with the municipalities. Similarly, the measures required for the construction of the RS1 were also described.

The study also makes suggestions with regard to the **design** of the infrastructure. Alongside the requirements of users, trends in electromobility and the specific settlement structures in the region, the quality criteria of the state of NRW regarding Cycle

Superhighways were also taken into account. The study illustrated that for each euro invested in the RS1 project a multiple benefit for the community would arise. In comparison to "normal" road building projects a comparable or even better cost-benefit ratio exists.

The RS1 follows a standard design and communications approach throughout its 101 km. This means that the RS1 looks the same in Hamm as it does in Duisburg, making it recognisable.

The study can be viewed at:
www.rs1.rvr.ruhr

EN ROUTE TO THE RS1 – STEPS TAKEN SO FAR

- 2010** The project idea for the Radschnellweg Ruhr through the Metropole Ruhr is born.
- 2011** Resolution of the association meeting of the Regionalverband Ruhr and letter of intent of all participating municipalities, the Regionalverband Ruhr and the state of North Rhine-Westphalia for the funding application to the Federal Ministry of Transport and Digital Infrastructure.
- 2012** Funding approval of the Federal Ministry of Transport and Digital Infrastructure, launch of the feasibility study by the Regionalverband Ruhr
- 2014** Completion and joint publication of the feasibility study by the Federal Ministry of Transport and Digital Infrastructure and the Regionalverband Ruhr
- 2015** Opening of the first, 6-km-long section of the RS1 in Mülheim an der Ruhr and Essen
- 2017** Opening of the Stadtviadukt in Mülheim an der Ruhr



WHAT ROUTE DOES THE RS1 FOLLOW? THROUGH THE TOWNS AND CITIES AND THROUGH THE COUNTRYSIDE ...

The RS1 is a cycle route for everyday use and therefore passes through areas where lots of potential users live, where it can benefit many people in their daily lives, every day: in the vicinity of universities, places of work with numerous employees as well as town and city centres.



Key

○ Workplace sites	— Route, including junctions
● Leisure destinations	Estimated number of potential cyclists per day
● Town / city centre / shopping centre	■ < 1000
● University site	■ 1000 - 2000
■ Main railway station	■ 2000 - 3000
● Other railway stations and stops	■ 3000 - 4000
	■ > 4000

Abbildung: RVR – Machbarkeitsstudie RS1

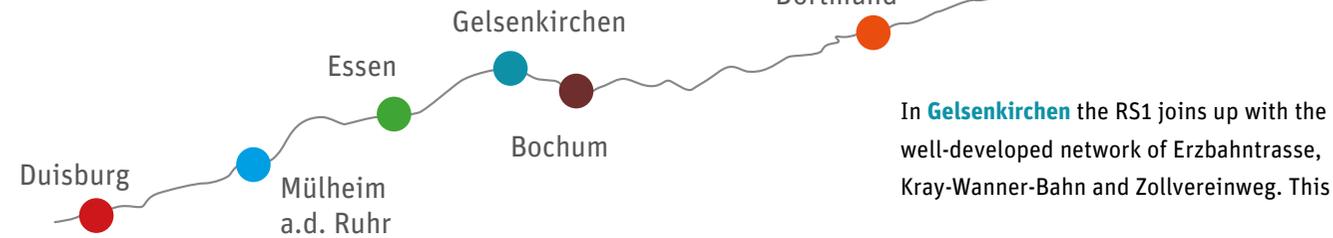
ROUTE: DUISBURG TO BOCHUM

The Hochfelder railway bridge in **Duisburg** marks the western starting point of the Radschnellweg Ruhr. It incorporates the towns and cities of the Wesel district on the left bank of the Rhine. Heading east, the RS1 route is characterised by the "Rheinische Bahn", an existing cycle route. This connects Duisburg main railway station, the University of Duisburg-Essen and the Dellviertel district.

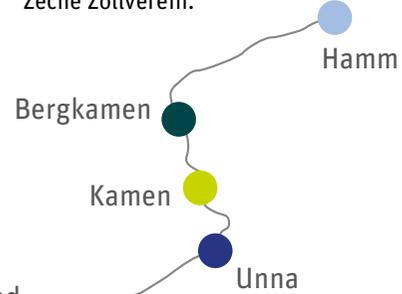
In **Mülheim an der Ruhr** the RS1 heads over the heritage listed Ruhrbrücke bridge and the impressive Stadtviadukt. The main railway station forms a transport hub, with the Ruhrbania urban development project,

the campus of the University of Applied Sciences Ruhr West, the MÜGA and the RuhrtalRadweg cycle path gaining direct access to the main railway station.

The section in **Essen** also features special attractions: along the Rheinische Bahn it links Niederfeldsee, the Krupp-Gürtel,



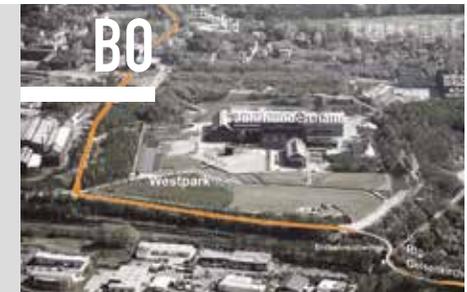
the university district and the city centre. Direct links connect the Gruga and Ruhr valley as well as the World Heritage site Zeche Zollverein.



In **Gelsenkirchen** the RS1 joins up with the well-developed network of Erzbahntrasse, Kray-Wanner-Bahn and Zollvereinweg. This

results in fast links to Gelsenkirchen city centre, the Wissenschaftspark, the easterly districts of the city and onwards to Herne.

To the west of **Bochums** city centre the Rheinische Bahn and the Westpark with Jahrhunderthalle characterise the RS1. It passes through the residential district between the Ehrenfeld S-Bahn station and the main railway station. Campus Bochum is connected via Universitätsstraße. Further along the RS1 connects to the Springorum-Radweg cycle path, joining the "Rheinische Esel" in Langendreer in the direction of Witten.



Illustrations: RVR – Machbarkeitsstudie RS1

ROUTE: DORTMUND TO HAMM

In **Dortmund** a wide range of impressions can be gained along the RS1: it connects the campus of the TU Dortmund via the Schnettkerbrücke bridge to sites of Dortmund University of Applied Sciences and Arts and the popular Kreuzviertel district. The Stadthaus railway station becomes a particular transport hub thanks to the cycle route. There are also plans for a direct link to the future "Gartenstadt-Radweg" cycle route.

New bridges, the expansion of existing

bridges and cycle-friendly junctions offer right of way for cyclists: the result is a high-quality direct link between Dortmund and **Unna**, which is particularly attractive for day-to-day cyclists. At the same time, the heavily-used Unna–Kamen cycle route is to be optimised.



Between **Kamen** and **Bergkamen** the RS1 crosses the Klöcknerbahn, which is already heavily used. Excellent connecting routes

such as the Seseke-Weg or the Kuhbach-Weg connect the inner city areas and surrounding districts. The railway station at Kamen is a particularly important transport hub for commuters. In Bergkamen-Rünthe a new bridge is planned to cross the Datteln-Hamm Canal.

Along its further course the RS1 uses the often already well-developed canal paths to **Hamm**. Here a new cycle bridge connects the city centre and the railway station.



Illustrations: RVR – Machbarkeitsstudie RS1

A DISTINCTIVE FEATURE OF THE RS1 — RECURRING DESIGN ELEMENTS

Surface: The surface has a high ride quality (typically asphalt).

Marking: Markings on the route are particularly distinctive. This creates clarity and promotes traffic safety.

Signs: In addition to the surface markings and signposting, specially-created posts and distance markers provide orientation.

Lighting: The RS1 will be illuminated throughout urban areas. Outside urban areas, only where necessary for reasons of safety, for example at junctions. The lighting is adapted to the relevant surroundings.

Rest and service areas: Rest and service areas along the route offer greater cycling comfort. There are large, small and medium-sized stations, designed in a similar and recognisable manner.

Digital connection/E-equipment: The RS1 also needs to be well equipped with the latest technology. The following aspects are conceivable, amongst others:

- a Cycle Superhighway app, allowing users to analyse their journeys,
- dialogue displays at the rest and service areas, showing the total number of cyclists, the routes covered and the CO₂ savings,
- Wi-Fi hotspots at rest and service areas.



Photo: P3 Agentur / wbp Landschaftsarchitekten GmbH / Stadt Mülheim an der Ruhr

WHEN WILL THE RS1 BE COMPLETED?

The goal is to have the RS1 largely completed by 2020. By that time the individual sections should have been built or expanded to the required quality standards.

The estimated total cost for the RS1 is 183.7 million euros. Nearly half of this is accounted for by the construction of special structures such as bridges and underpasses, whilst the actual construction of the route makes up only around 20 % of the total costs. These costs are relatively low, as for a large part of the RS1 existing infrastructure can be used, such as old railway lines.

Approximately 10 % of the total costs are planning costs. One kilometre of RS1 in a densely built-up area of the Metropole Ruhr costs around 1.8 million euros.

With the amendment of the NRW road and routes legislation the construction and upkeep of regional Cycle Superhighways has been transferred to the financial responsibility of the state of NRW. In addition, throughout Germany the federal government provides 25 million euros a year to support Cycle Superhighways.

THE RS1: FOR YOU, FOR ME, FOR US!

The RS1 is far more than just a fast cycle route! It passes through ten towns and cities and the district of Unna, runs along trunk roads, railway lines and waterways and crosses meadows and woods. The RS1 links the municipalities of the Metropole Ruhr for cyclists, directly and without diversions. Journeys are made considerably shorter. This is to the benefit of many commuters, who can relax on the cycle ride to work instead of sitting in traffic jams.

However, car drivers also benefit from the RS1: three quarters of all hours spent in traffic jams arise due to congested roads. An attractive Cycle Superhighway can help here – after all, those riding bicycles are not sitting in cars. Each cyclist helps to decongest bottlenecks and traffic hubs.

The numerous connections between the RS1 and public transport promote and facilitate the transition from one form of transport to another. The linking of city centres and key innovation areas such as Technologiepark Dortmund or Ruhrbania in Mülheim an der Ruhr also make the RS1 an engine of urban development. The area around the RS1 is a space for diverse, new and creative ideas and innovations. Join in and support the project with your ideas and comments.

Information and room for your ideas can be found at www.rs1.rvr.ruhr ...