

You see ...

... that the advantages of the Dortmund clear: we're on the right track. The ongoing improvement of this unique network as specified will be the platform from which our city can continue to travel into Dortmund and the region. And, of course, for all our guests too. Our metro system is fulfilling an important and effective role in turning the new Dortmund into a top

Why don't you come and see for yourself?

This brochure was produced and published by ...

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— the Communications Agency GmbH

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Dortmund: On the Right Track into the Future





One proud and important aspect of network created by our Stadtbahn, acts as the backbone of our public transport system. Its gradual expansion

None of this would have been possible without the combined effort of the Stadtbahn experts at the Depa ment of Planning, Urban Developme & Infrastructure who have driven this futuristic project forward with great professionalism and great enthusiasm. Your I would like to take this opportunity

Dortmund are kept up and running.

In doing so, they provide an attractive

transport service that meets the needs

of the daily passengers — not least for

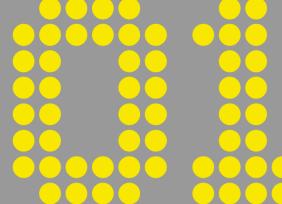
of expressing my gratitude and my Goward Language recognition of their achievements. The same goes to DSW21 – our Public Dr Gerhard Langemeyer Transport Authority – whose officers Mayor of Dortmund entrusted to them by the City of











Dortmund: On the Right Track into the Future



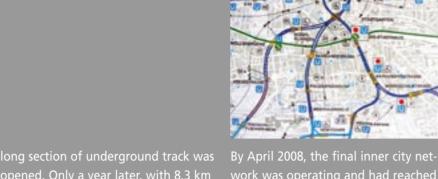
ities for people. A principle Dortmund recognised very early on. The starting signal for the construction of the Dortmund Metro was given in autum Right Track into the Future has indicated which direction the expansion o the public transport service should go in. From the very beginning, the vision was one of a public transport system running as unimpededly as possible.

was a viable middle way between ınderground railway and tram. The solution was found in die Stadtbahn (or Metro) – with the blue logo of downtown part of the city, travels underground but which otherwise travels on its own overground track. It



the traditional underground. Efficient, fast and safe, it also permits a flexible This was to be a service that enables and gradual system proceeding from

And so the inner-city tracks were given their own tunnels — in order to get away from the road traffic and create connections that were more direct and more speedy. Bus routes were ground and tram. The suburbs were integrated into the public transport network chiefly by overground track. As early as May 1983, the first 1.5-km-



pened. Only a year later, with 8.3 km work was operating and had reached ful nnelled, passengers could travel from capability.

> With the city centre as the hub, the triangular structure of the municipal rail system makes for fast connections to the suburbs and the district centres. The three downtown interchange stations of Stadtgarten, Kampstrasse a centre, passengers only have to change once at the most – quickly, conveniently they travel from any starting point to any destination on the network.

At the same time, from the angles of urban development and public transport, the way was made free (i) for a re-alignment of the Hellweg axis to the west and east of the Wallring orbital and (ii) for the construction of the Neues Westenton at the Dortmund U, a designated arts centre, and of the city centre boulevard



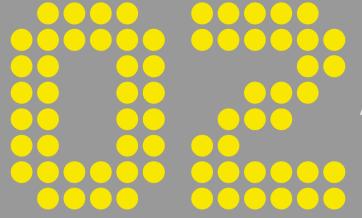




orth to south Dortmund in half the

ime it took previously.





A vision becomes reality

Today, the Dortmund rail network has reached a length of 75 kilometres. Seventy-five kilometres of efficiency, convenience and congestion-free travel for the users of Dortmund city transport. By 2007, with grant-aid from the state of North Rhine-Westphalia and the federal government, the City of Dortmund had invested a total of 1.3 billion in the construction of a metro system with integrated infrastructure.

As the city transport operator, DSW21 sees the Stadtbahn as the key to general improvement in the public transport network. Number of passengers a year in millions

130

107

1996 2001 2007





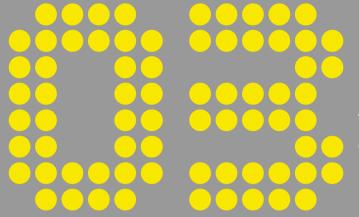
Since 2002, modern high-floor metrorail carriages (B-carriages) have run on all the north-south sections. April 2008 saw the introduction of the new semi-low-floor metrorail carriages (NGT8s) on the east-west- and the Borsigplatz section, thus creating the right conditions for barrier-free access at all the stations and stopping points.

is popularly known as die U-Bahn
— i.e. Metro or "tube". A not
entirely accurate designation. Only
a good third (20.5 km) goes underground; most of the track (54.5 km)
is on the surface.

With a few exceptions, the overground section is not impeded by other traffic, which makes for greater safety and smoother operations — essential features if the local citizens are to find the transport service attractive and convenient.







A big boost for a distinctive city centre

The far-sighted Metro strategy continues to open up new possibilities for the structural evolution and redevelopment of today's Dortmund. This is especially noticeable in the city centre ...

- ▶ Projects that transform the function and the structure of the town as a whole, private investments in particular, are being encouraged and integrated.
- Roads and squares can be redesigned and reconnected and historical buildings, churches and public spaces can take on new prominence.
- ➤ There is more room for new green spaces, artistic objects and fountains.

Many and varied opportunities for play, going for a stroll and staging events are the outcome. The attractivity of a city centre with all the best connections has increased enormously. The restyling of the city centre on the basis of the inner-city policy adopted by the City



Council would not otherwise have been conceivable. It was this that made the reconstruction of many parts of town possible. At the beginning of 1985, traffic density on the then north-south axis of Kleppingstrasse to Kuckelke was as high as that of an urban motorway.

Once the through traffic had been banished from the city centre – and rerouted around the Wallring (the inner orbital) – the way was free for an inner-city pedestrians-only boulevard with alfresco cafés and restaurants. A scene without which the cityscape would be unimaginable today. While the Metro chauffeurs its passengers beneath the city centre, downtown Dortmund – now on reclaimed traffic-free territory – beckons with a mix of Mediterranean flair, places to linger and numerous events.

Meanwhile, managers at the large insurance companies, cultural facilities and retail stores (to name but a few) are discovering the city centre's potential for business. An area which includes St Reinholdi's Square, Friedensplatz ("Peace Square"), the City Hall, the City Gardens, the Königswall and the Central Railway Station Forecourt as well as the Hansaplatz, the combined Westenhellweg & Ostenhellweg main shopping precinct and, last but not least, the Kampstrasse/Brüderweg boulevard. None of this redevelopment in Dortmund could have taken place without the construction of the Metro acting as the locomotive!











Lively city districts with all the best connections





As the new Dortmund Metro expanded, new centres in the urban districts were to emerge. The individualised appearances of the stations and/or stopping points also drew attention to the suburbs.

Eye-catching interchanges

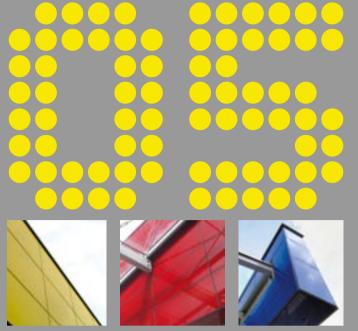
A true public transport network. At the most important interchange points in Dortmund, the Metro trains are designed to hook up to adjacent bus routes and local trains (die S-Bahn). The significance of each station is highlighted by special individual architecture.

On the surface, the location-led ideas of the architects and designers unfold their effect at the overground stopping points in the various districts. The slightly diagonal roof supports and lamp poles of the stopping points on the Hombruch line symbolise the mobility and dynamism of the Dortmund Metro. In Eving, the unitary design of the stopping points with their wavelike curved roofs elegantly reflects the different road gradients.









Architecture spanning time and distance

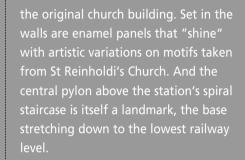
Thanks to the attractive architecture of the overground stopping points or platforms and, similarly, to the individual design of the underground stations, the Dortmund Metro is helping to improve the cityscape all round. Designed by a number of different architects, the structures make the face of Dortmund an imposing and unforgettable one. They turn the Metro stations and stopping points into top addresses. Indeed, the stations at Westfalenhallen, Stadtgarten, Reinoldikirche and Westentor (Westphalia Halls, City Gardens, St Reinholdi's Church and Westgate respectively) are distinctive municipal features in their own right.

Each underground station in Dortmund has its own design and inimitable theme.

Passengers in the east end of
Dortmund know exactly where they are
at any given time, since the designs of
the stations along the east–west tunnel

section thematise specific historical landmarks from Dortmund's past.
Ostentor Station, for example, recalls the city gates of medieval times. Lots of people are aware of the rebuilt Adlerturm in the Dortmund city centre. But who knows what the gateways of Schlangenturm, Schwanenturm, Höllenturm and Kuckelketor once looked like? No matter, the depictions along the inviting, brightly lit platforms at Ostentor Station reveal all. And not just to everyday passengers but to people who've signed up for a guided tour of the city.

The design of the Reinoldikirche Interchange Station, with its circular concourse, is based on the nearby church of the same name. Bright-coloured natural stone of different kinds was chosen as the flooring at all levels whereas the walls, made of a similar natural stone material, are reminiscent of the sandstone used in











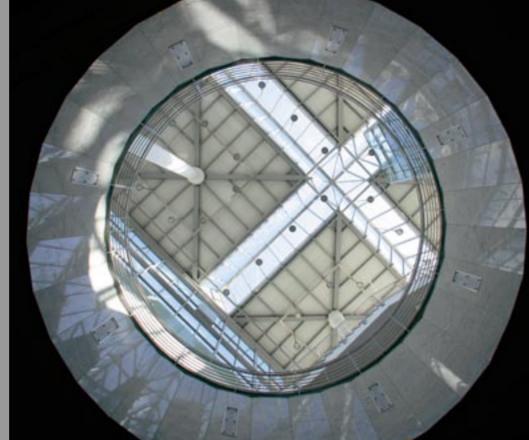


Kampstrasse Interchange were com-Designed by the same architects and

Set in cool light natural stone, the artistic design of the platform outer walls relates to the nearby City & State celebrate the revival of Dortmund's Library and the theme of new media. A concept shown by means of the library's silhouette for the structure enclosing the media section. Collages comprising letters of the alphabet symbolise the printing industry while

were given a cladding of blue glass issioned in 1984. A further deep-level mosaic. Meanwhile, aboveground, a large foyer marks the Neues Westentor only as a shell — to be woken from its — at the Dortmund U (a designated arts "Sleeping Beauty" status 30 years later centre around the corner). The concept and extended for the east-west tunnel. behind the design of the Westentor Station underground is aimed at artists, the two platforms are different, maximum transparency. Galleries and however. If the top level is remarkable rotundas ensure that the underground for its warm red brickwork with green platforms receive large swathes of

> That effect is brought out by the light colour tones of the ceiling, wall and floor covers. The mural paintings historical entertainment venues — all of them connected by tram lines.









impressive for its open hallway. The platform itself lies under a colliery-style Dortmund's former collieries and arch with an excavated cross-section of 160 square metres. As such, the opening is larger than the fourth cylinder at Hamburg's Elbe Tunnel. As you come into the concourse, you get a green and yellow. The lift system shines view of the entire platform area spread in red. Also, the consistent use of the

out below. Collages on the enamel walls, which are 90 metres long, evoke colour coding, each entranceway gets a you through the station. LED lighting distinct colour ... with the stair entranc- makes for changing moods. es thus lighting up in orange, blue,

makes finding your way around child's play. As glass mosaic "carpets" in the light granite floors, they accompany













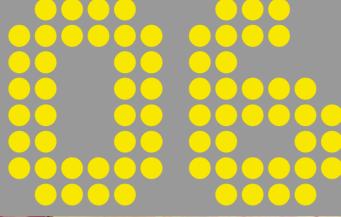




Giving and showing respect

Our aim with all these carefully selected and individual designs was to show respect to our passengers, our customers. We want them to feel at ease. People who feel at ease will identify with the surroundings and show respect for "their" Metro.





Good for people and the environment



People who do most of their roundthan those who take their own cars. The environment benefits from ...

- ▶ less energy consumption

- less noise.

The ABC of energy calculations

When it comes to energy consumption, the Metro is ecologically much three times to nine times more energy efficient! In the morning rush hour, for example, assuming that the carriages generates 13 to 27 times less CO₂ than a car user.

full, then the energy consumption per person is still the equivalent of just

one litre of petrol per 100 kilometres. own travel via public transport pollute If carriage capacity is full, the energy the environment less, significantly less, consumption sinks to a mere 0.2 litre per person. Translated, this means that when you travel by Metro, you only need a lemonade glass of petrol for a distance of 100 kilometres. Or with a litre bottle of petrol, you could get from Dortmund to Berlin. Just try that with a car! Even the most ecologically designed motorcars simply cannot compete when compared to the Metro Plus which, you get a chauffeur who concentrates on the driving, leaving

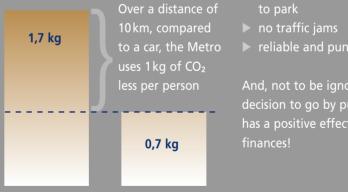
Public Transport in Dortmund — an integral part of the solution

Having conducted a survey on mobility to calculate the reduction in CO₂ emis If a metro carriage is only averagely sions that the public transport system in Dortmund achieves if compared to individual car use. By 2006, approx.



130 million passengers were enjoying the benefits of public transport for their personal mobility. If they had covered the same distance in their cars, racks at suitable stations and stopp they would have clocked up 1.4 billion kilometres. And if we apply that amount to all the individual journeys on municipal territory, we get a most

Passengers who take the bus or the Metro in Dortmund – and so avoid shoppers, visitors, day-trippers and all those car kilometres – reduce their tourists alike – this means ... combined carbon footprint by 140,000 ▶ less stress tonnes!



Car Metro

to bus and German Rail stations, points all go to make the environm friendly integrated transport system a truly attractive alternative means of

For passengers using Dortmund

- ▶ no hassle searching for a place to park
- to a car, the Metro

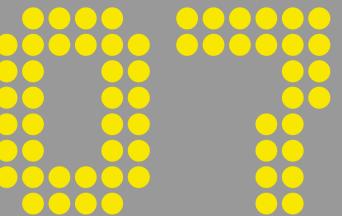
 reliable and punctual travel.

And, not to be ignored, taking the decision to go by public transport has a positive effect on your person









Tunnel construction in the coal-mining tradition









Since the 1980s, there has been a change in the construction of underground railway systems as the closed-cut method of building came to establish itself. In contrast to the early open-cut building method, the tunnel tubes are now constructed using coal-mining technology — i.e. up on the surface you would not notice the building site under your feet. Only at the start and at the end of the tunnel section does an access or service shaft become necessary for the transportation of building materials. These shafts are usually located in such a way that they subsequently form the basis of access ways to the stations and

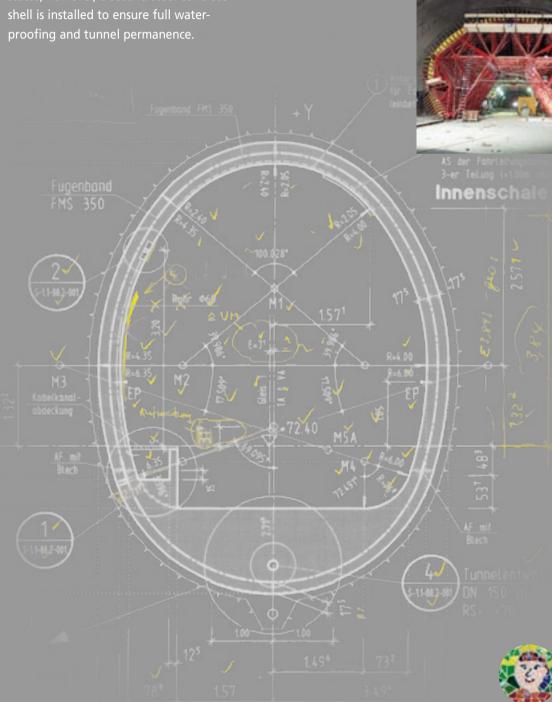
Still, surface proximity makes the construction of a tunnel based on deep-level coal-mining technology a particularly challenging task. Geologically speaking, it presupposes a solid rock mass. And the marlstone here provides the Dortmund Metro with a solid two to ten metres thick stratum between the tunnel and the surface.

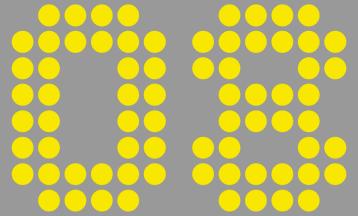
As soon as the tunnel boring machine or special excavator has cut a cavity through the earth or stone, this then has to be jacked up in short sections by means of steel arches, mesh reinforcement and air-sprayed concrete. Thanks to the outer shell that so emerges, it is possible to counteract any loosening of the rock and/or actual rockfall. In other words, the rock remains stable.

Although the geology of the area is always thoroughly explored beforehand, tunnel engineers can never be totally immune to surprise — unexpected flooding, for instance, or divergent underground formations. That being so,

a swift and flexible response is the order of the day via supplementary fixes using pumps, props or steel boards.

The air-sprayed concrete cladding also ensures that the tunnel remains stable during construction. For final status, however, a second steel-concrete shell is installed to ensure full water-proofing and tunnel permanence.





Convenience, service and safety

The future development of the Metro will depend on the requirements public transport service. A service which will grow with its passengers, for its passengers. A service which, with with 100-cm floor height (high-floor). further expansion and adaptation, will react flexibly to changing needs.

The Dortmund Metro runs more or less independently of other traffic flows and enjoys right of way at the overground junctions. This is essential when it comes to providing a speedy and safe public transport system with short travel times and reliable connections. After all, passengers place great value on technical and personal safety as well as on service and comfort.

Which is fair enough: everyone likes to feel at ease in "their" train.

met by modern and people-friendly Since April 2008, trains with 40-cm floor height (semi-low floor) have been deployed on the east-west and the Borsigplatz line.

Also comfortable and convenient are the stylish weatherproof stopping points and door-level platforms. In other words, barrier-free access for wheelchair users and disabled people and senior citizens and parents with



U45	Fredenbaum	1 Hin
146	Brunnenstr.	2 Min
042	Hombruch	3 Min
1149	Brambauer	5 Min
047	Liesterfilde	5 Min
U42	Grevet	6 Min
1346	Liestfalenhallen	8 Min
041	Hafen	9 Man



High-tech systems give life to the whole service concept. The passengers on the platforms are kept updated at all times by the large electronic info boards, helping them to make that all-important connection. And via the loudspeakers so installed, we can back up e-information with appropriate













Similarly, if individual advice is required, DSW21 officers are on hand at the customer service points in the city-centre stations. The user-friendly automatic ticket machines are also a boon.

Behind the scenes, it is the operations control centre at Stadtgarten Station that is the nerve centre of all this activity. All the information and data from the network merge here. And, invisible to the passengers, there

are any number of technical services in place ...

- ▶ substations for a reliable supply of power to the trains and to stations
- power supply installations operating on a redundant basis to eliminate outages
- train control technology for safe reliable operations
- ▶ IT and operative components such as clocks, PA and video equipment as well as mobile phones and radio systems
- machinery and power for the HVAC (heating, ventilation and air-conditioning), lifts and sanitary facilities as well as fire protection devices and roller shutter doors at the stations.

These sophisticated systems are all linked by means of copper and optical fibre conductors.

On a 24/7 basis, the specialists from DSW21 control the operating systems and monitor safety on all sections of

track. In addition to the operating technology, automatic plant management and track safety control, the Control Centre is also responsible for video surveillance.

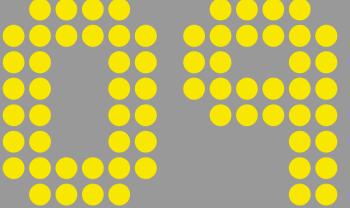
Passengers can contact Control
Centre staff direct via the emergency
phones installed for that purpose. In
the event of acute danger, passengers
can use the emergency brake to
prevent a train driving into a station
area. Info display boards, loudspeakers, cameras, emergency phones and
emergency brakes are the only technical components that the passengers
ever really see. Technology and people
working in the background ... all at
your service!











Dortmund Metro — an important piece in the mosaic of modernisation



A highly developed public transport system well-connected to the regional and European railway networks has found acceptance in Dortmund. Such a network is also a huge location bonus.

The high efficiency of the Dortmund Metro as part of the public transport system is an argument that weighs well with any decision-maker.

- Companies from the small business, retail, service and manufacturing sectors all need a reliable and punctual public transport system for their employees and their customers.
- The retail trade and the gastronomic sector depend on the convenience of a public transport system so that customers and guests can get to them without fuss.

➤ The organisers of cultural and sports events, tradefairs and conferences are totally reliant on underground and/or metrorail services, since it is only their efficiency that can move masses of people around effectively. As demonstrated in champion-like style during the World Cup football matches held 2006 in Dortmund.

In the future too, the public transport system as a unitary whole will help persuade innovative firms to come and set up business at new locations such as the Stadtkrone Enterprise Park, the Phoenix Regeneration Area and the Technology Park. The latter, by the way, can also be reached from the Technical University of Dortmund by the unbelievably reliable suspension monorail service.

As an unrivalled public transport system, the Dortmund Metro rates highly with people looking for new jobs in Dortmund.

A smooth-running pleasant public transport system is a hugely important location factor for people working in all kinds of sectors: research & development, industry, retail, gastronomy and the arts & culture. A principle Dortmund recognised very early on. If, in the old days, trams ferried the workers to the steel plants, breweries and collieries, today the Dortmund Metro whisks visitors and customers into the city centre as well as providing the employees at the numerous service provider firms with a convenient ride to work.

What's more: the Metro ensures that the parks and the green landscapes are quick and easy to reach, as are the latest cultural highlights and the various fascinating memorials to Dortmund's industrial past.

















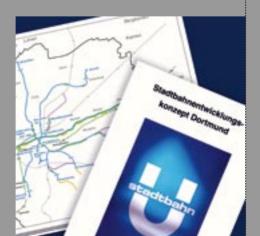
The Dortmund Metro: a bright outlook for future generations



The Metro is an important stone in the mosaic that is the new fast-paced

metrorail backbone, especially in the city centre. But we are not going to sit back on our laurels yet: there is still a lot to be done by way of decongesting a number of junctions and bottlenecks in the suburbs and plugging some gaps in the network system. Accessibility is being completed step by step. As of 2008, 71 % of all stopping points were barrier-free for access.

In 2008, in its document entitled Metro Development Dortmund, the Council has provided for some further modest additions and some economically viable track extensions, all of which are development. As for the long-term future, just to be on the safe side, it has been decided to keep some route corridors in reserve for potential track.





En route to success

milestones in the history of the Dortmund Metro

1968 September

Dortmund City Council gives green light for the construction 1991 June of a metrorail system in the city centre

1969 October

Groundbreaking ceremony for the first tunnel and the Königswall pedestrian precinct just south of the Central Railway Station

1976 May

Direction Grevel: 4.2 km overground "independent fast tram" from Derner Strasse to Grevel with stopping points and platforms at Franz-Zimmer-Siedlung, Kirchderne, Gleiwitzstrasse, Flughafenstrasse, Scharnhorst-Centrum, Droote and Grevel

1983 May

and Clarenberg

1984 June

Direction Hörde/Aplerbeck and Hacheney: 9.5 km with the stations of Schützenstrasse, Münsterstrasse, Leopoldstrasse, Central Railway Station, Kampstrasse, Stadtgarten, Stadthaus, Markgrafenstrasse and Westfalenpark as well as the stopping points Rombergpark, Hacheney, Lortzingstrasse and Kohlgartenstrasse

1986 August

Direction Hörde: 2.7 km with the stations of Märkische Strasse, Karl-Liebknecht-Strasse, Willem-Van-Vloten-Strasse and the stopping point of Kohlgartenstrasse as well as, in the city centre, the stopping points of Immermannstrasse

First deployment of the 2.65-metre-wide metrorail carriages (B-carriages) between Hörde and Fredenbaum

1990 0.3 km Remydamm with a stopping point

Hafen Stopping Point

1992 January

Direction Westerfilde between Hafen and Huckarde Bus Station: 3.4 km with the stopping points of Hafen, Insterburger Strasse, Huckarde Abzweig and Huckarde Bus Station September

Track section towards Grevel from Stadtgarten Station to Franz-Zimmer-Siedlung: 6.5 km, of which 2.5 km tunnel with stations at Stadtgarten, Reinoldikirche, Brügmannplatz, Brunnenstrasse and revamped stopping points at Glückaufstrasse, Eisenstrasse, Burgholz, An den Teichen, Bauernkamp, Schulte-Rödding and Franz-Zimmer-Siedlung. Plus 1.0 km of service line to the central workshop in Dorstfeld

1993 August

Stopping points at Westerfilde and Huckarde Bus Station

1994 September

Direction Aplerbeck: acceleration track between Vosskuhle Stopping Point and Aplerbeck Terminal

Tunnel between Stadtgarten and Städtische Kliniken stations

Parsevalstrasse to Westerfilde

1996 June

Tunnel between Stadtgarten and Polizeipräsidium stations and the new stations of Saarlandstrasse and Polizeipräsidium

1997 March

Aplerbeck Terminal

1998 May

Tunnel between Polizeipräsidium and Westfalenstadion as 2008 April well as Remydamm with the new Westfalenhallen Station

November

Deployment of B-carriages on the U45 line

2000 August

Fredenbaum to Grävingholz with rebuild of the B54 road plus the new stopping points of Güterstrasse, Zeche Minister Stein, Amtsstrasse, Externberg and Grävingholz

2001 August

Westbound platform direction Brambauer from Kemminghauser Strasse to the A2 motorway with the stopping points of Waldesruh and Maienweg

2002 January

Brechten to Brambauer with the stopping points of Brechten Centrum, Oetringhauser Strasse, Herrenteystrasse, Brambauer Krankenhaus and Brambauer Verkehrshof

April

Direction Brambauer: stopping point at Wittichstrasse

Direction Hombruch: from Städtische Kliniken to Hombruch with Möllerbrücke and Kreuzstrasse Stations and the stopping points of Theodor-Fliedner-Heim, An der Palmweide, Am Beilstück, Eierkampstrasse, Harkortstrasse, Hombruch Hallenbad and Grotenbachstrasse

July

East-west section: stopping point at Lippestrasse Direction Grevel: Schulte-Rödding P & R facility

Part section of Evinger Strasse between Schiffhorst and A Gulloh with the newly constructed Schiffhorst P & R facility

2003 December

Direction Aplerbeck: Hauptfriedhof Stopping Point

2005 March

Direction Hombruch: Barop Parkhaus Stopping Point

Direction Westerfilde: Obernette Stopping Point

East West Tunnel with stopping point at Heinrichstrasse, the new stations of Unionstrasse, Westentor, Kampstrasse (two underground levels), Reinoldikirche (one underground level) and Ostentor as well as the tunnel branch-off in the direction of Borsigplatz

Overground east-west section and Borsigplatz section including twelve stopping points with platform or raised level: Witterner Strasse, Heinrichstrasse, Lippestrasse, Funkenburg, Am Zehnthof, Rüschebrinkstrasse, Knappschaftskrankenhaus, Brackel Kirche, Dörighoff, Zugstrasse, Geschwister-Scholl-Strasse and Enscheder Strasse

July

Direction Wickede: extension at Asseln with stopping points at Businkstrasse, Asseln Aplerbecker Strasse and

