

From Infrastructure Planning to an Integrated Transport Development Policy

Dresden Transport Planning – Past and Present

Transport planning is an exciting field within the urban or, in general, spatial structuring development strategies. With the expansion of the towns into industrial conurbations within the course of the 19th century and the creation of a public transport system, transport planning crystallised as an independent branch of town and country planning and therefore gained in importance in the 20th century. Transport planning also has a long tradition in Dresden.

In the first decade after the Second World War, the focus was on the reconstruction of the city in order to create a foundation for a new policy concerning transport and

urban planning. In the 1960s and 1970s the master plans for urban development and transportation were developed based on the respective scientific knowledge. Many approaches and drafts were not implemented for a variety of reasons.

In the 1980s up until the political change in 1990 it was the task of transport planning to aim for the connection of a useful transport organisation with the development of a basically already integrated transport system. The issues of disabled people, cyclists and pedestrians increasingly received more attention.

The time around the year 1990 was ultimately a new beginning for the transport planning in Dresden. It was the time of the

‘Round Tables’ (also in transport planning), in which the citizens took the destiny of the city in their own hands. From this came the phrase ‘Overall concept for the transport policy in the conurbation of Dresden’ which stands for a new start, democracy and the will of the people in the history of Dresden Transport Planning. This material was then the basis for the Transport Concept of 1994.

The transport policy in Dresden was continuously updated, reviewed and extended resulting in an integrated Transport Development Policy.



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Office, Department of Transport Planning)

With the friendly assistance of
Dresdner Verkehrsbetriebe AG

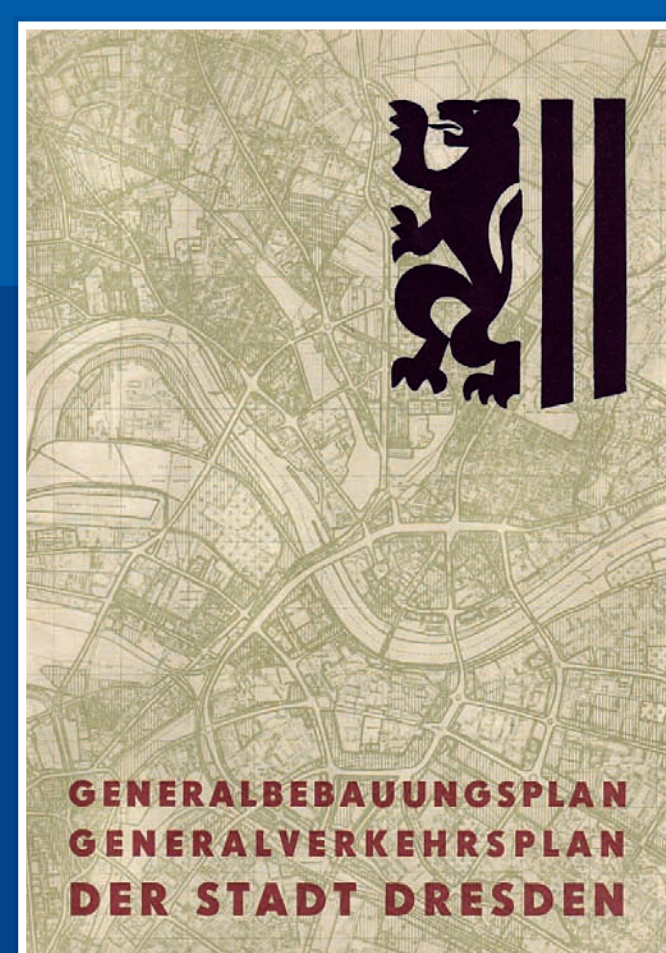


Overview

The City of Dresden's Transport Concepts from the 1950s to the present



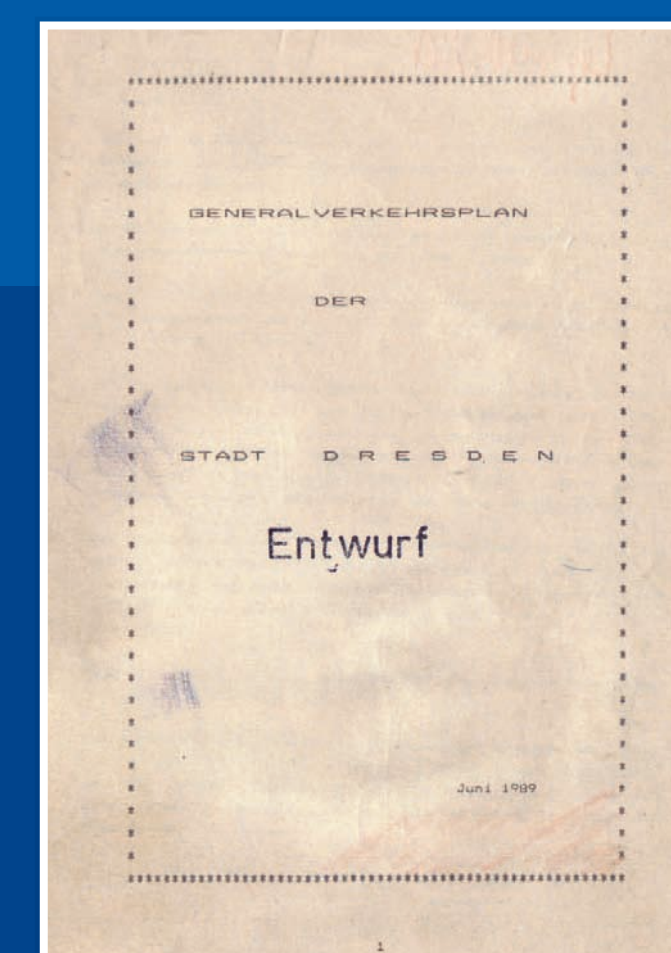
1950



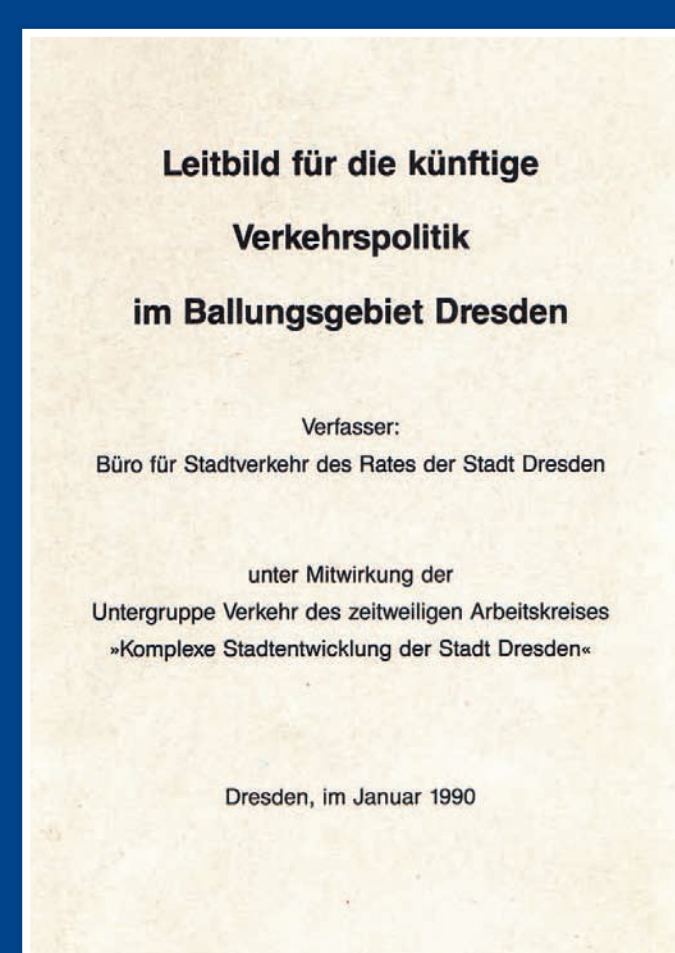
1967



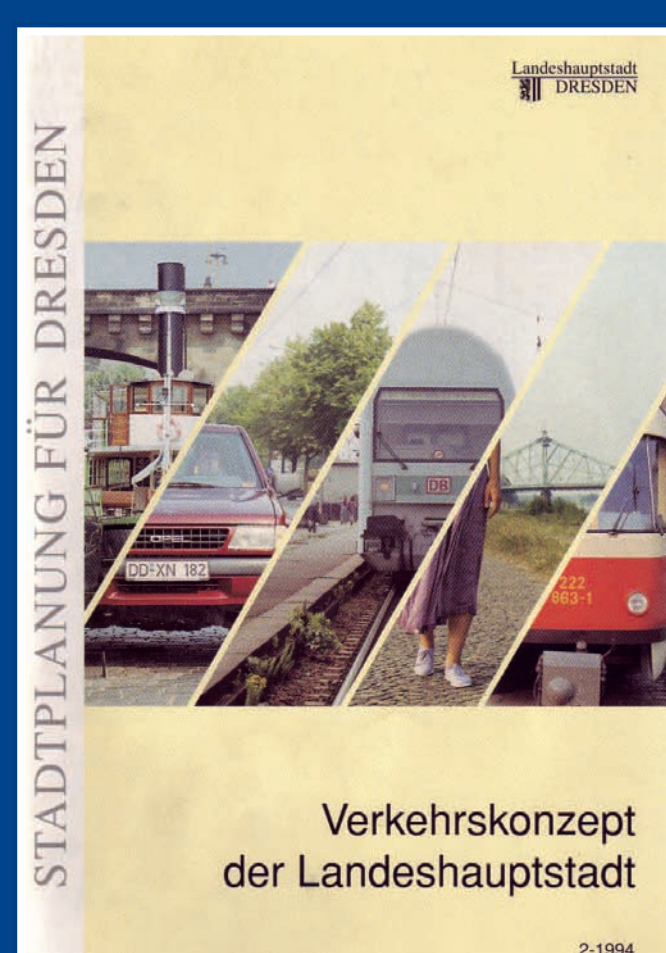
1977



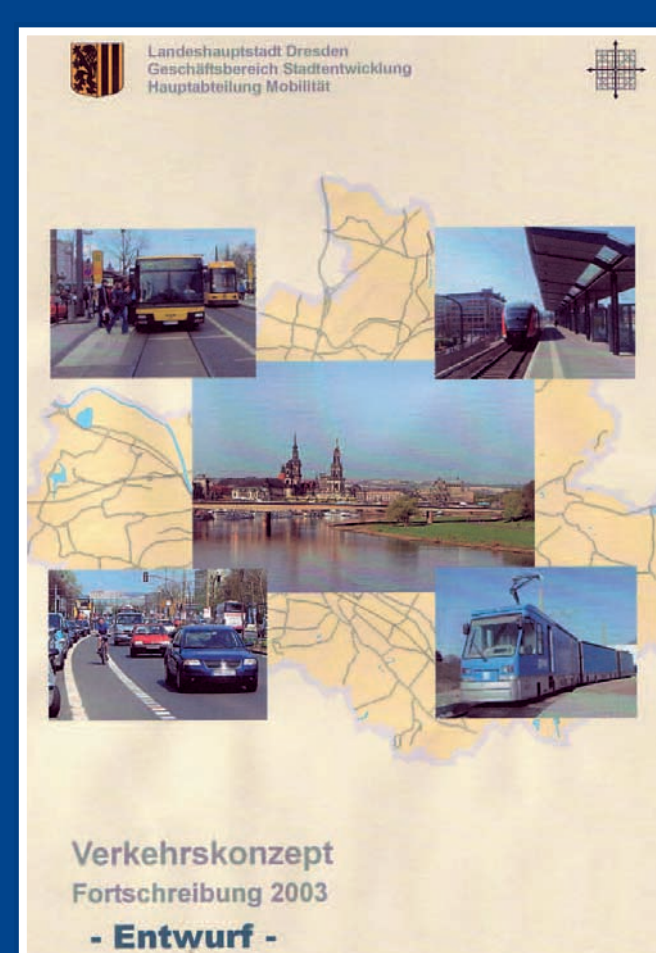
1989



1990



1994



2003



2006

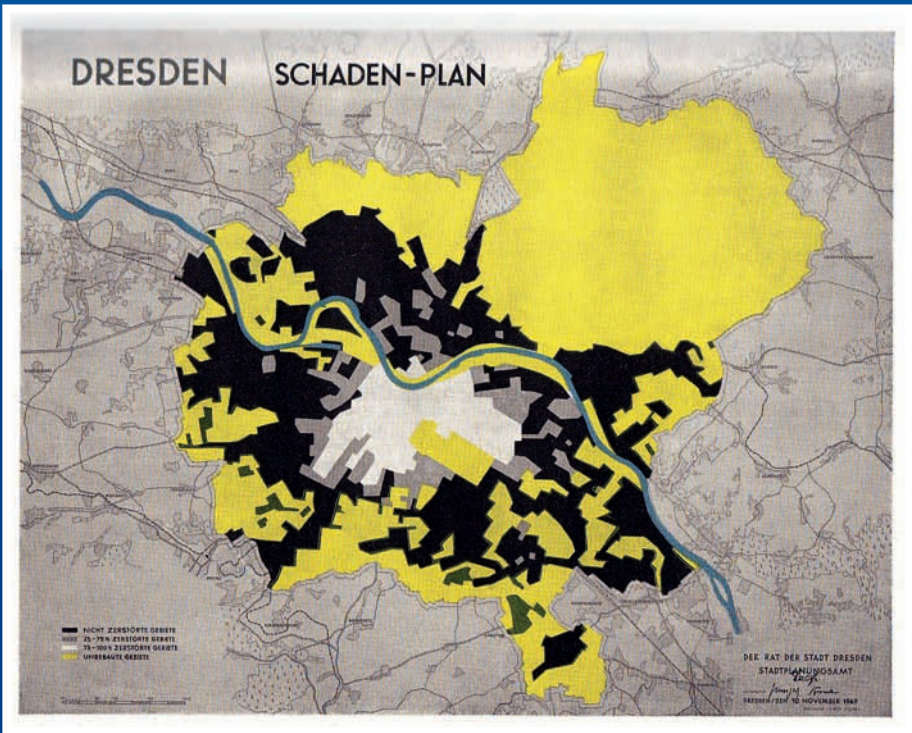
Transport conceptions through the changing times – not only in name and appearance – are lived out stories and witnesses of different eras from the reconstruction after the night of bombing on 13 February 1945 and the changes and ideals of the GDR past, the new democratic start after the wall came down in 1990 to the status as European city in the 21st century.

The 1950s

New Start of the Urban Development after World War II

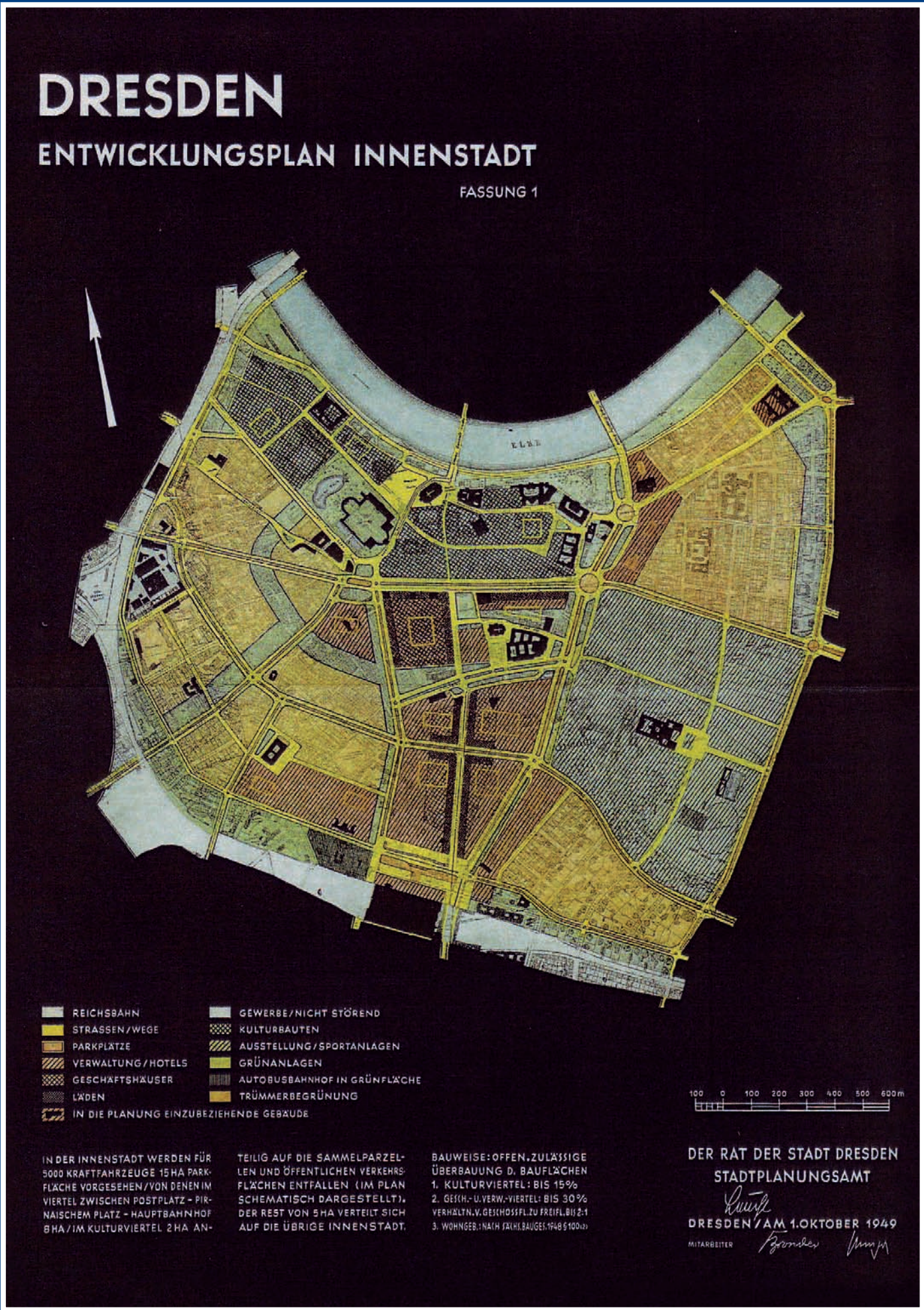


The traffic conceptions of the 1950s are characterised by ideas of reconstruction of the city's (and the transport) infrastructure as well as the intention of organising a new start.

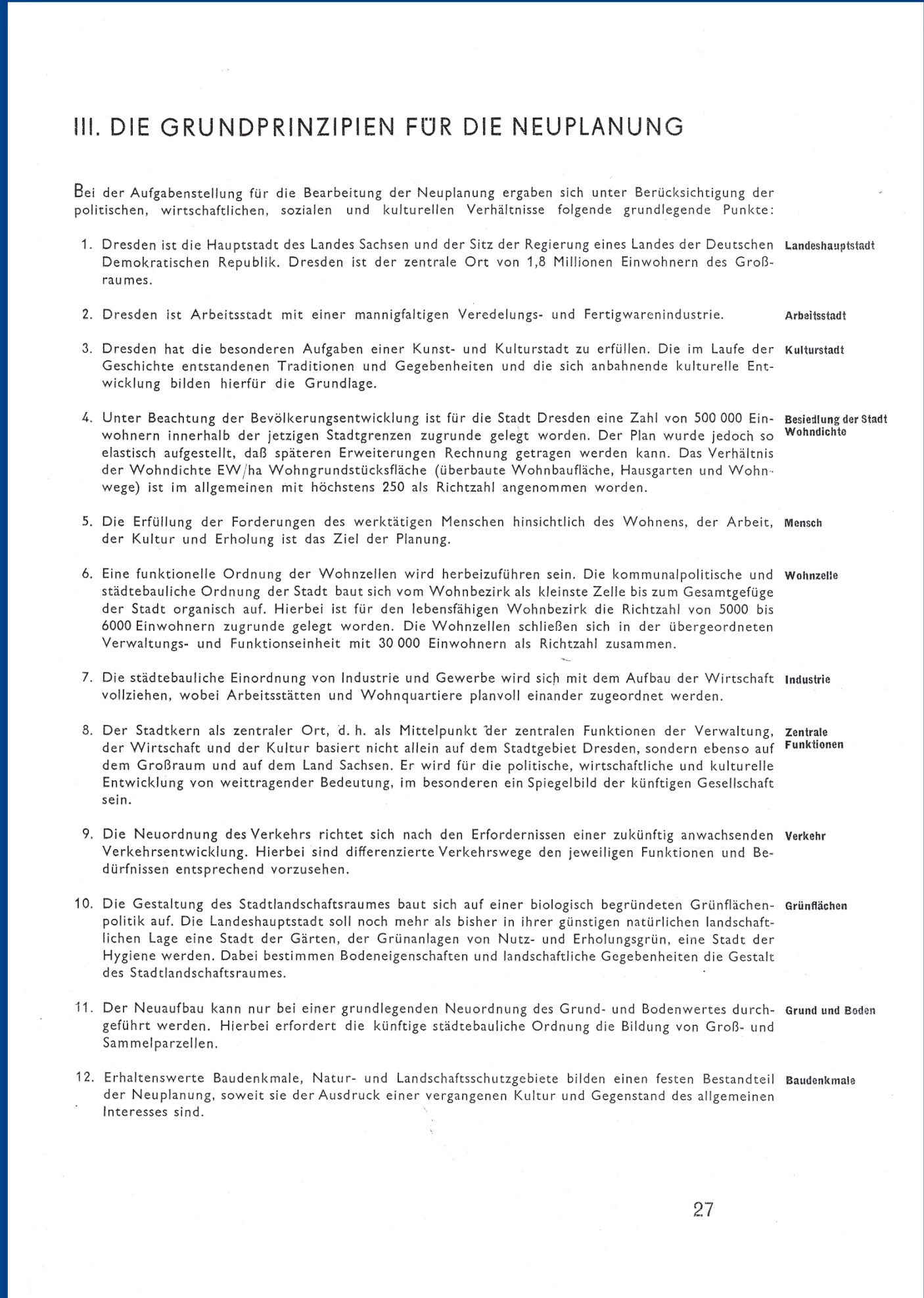


The Legacy of the Night of Bombing - 13 February 1945:

- › At least 25,000 lives were wiped out,
- › 10 million cubic metres of debris,
- › 12 km² of the city were completely annihilated,
- › 39 % of all flats in Dresden were destroyed,
- › 36 % were partly damaged, only 25 % were preserved



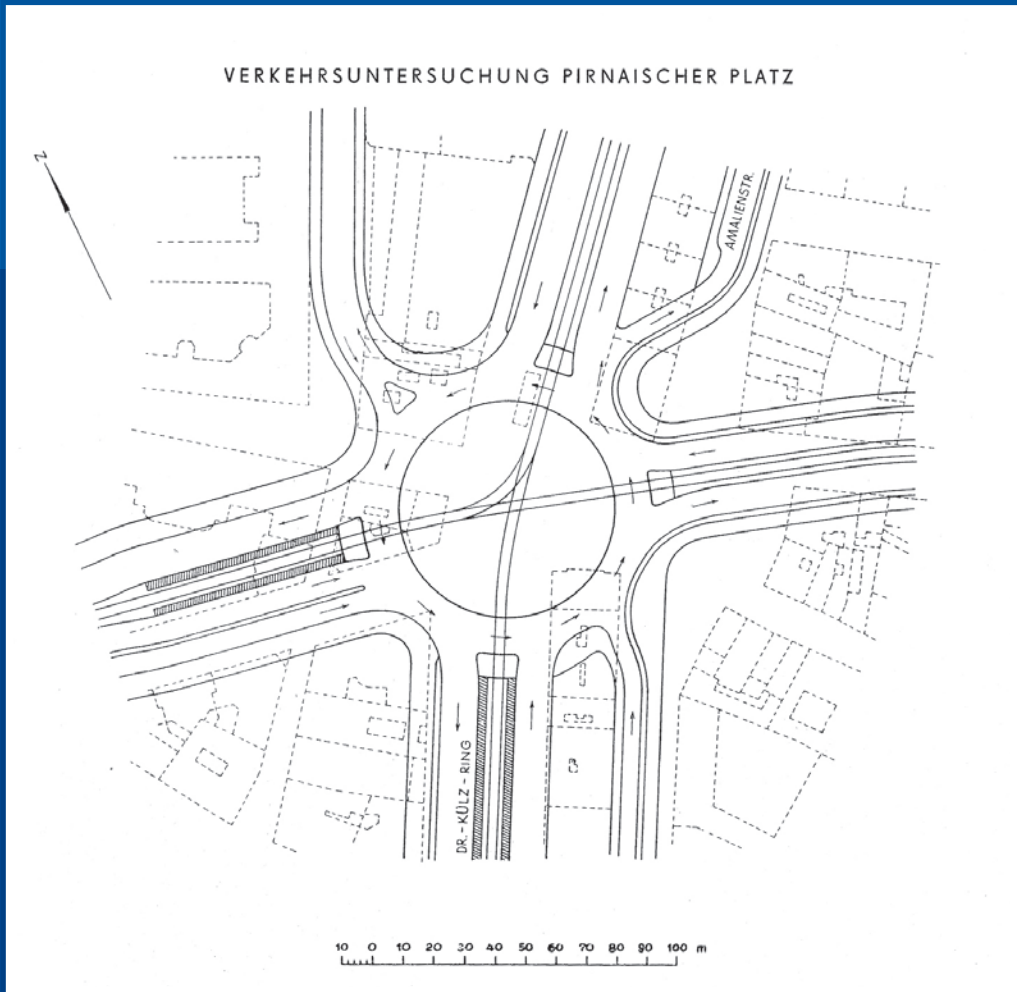
This precursor of a Land Use Development Plan for the Dresden city centre from the year 1949 marked the new start for urban development. Parking spaces were intended for 5,000 vehicles. (In comparison; today there are approx. 22,000 parking spaces within the so-called '26 Ring' - the former 26 tram line).



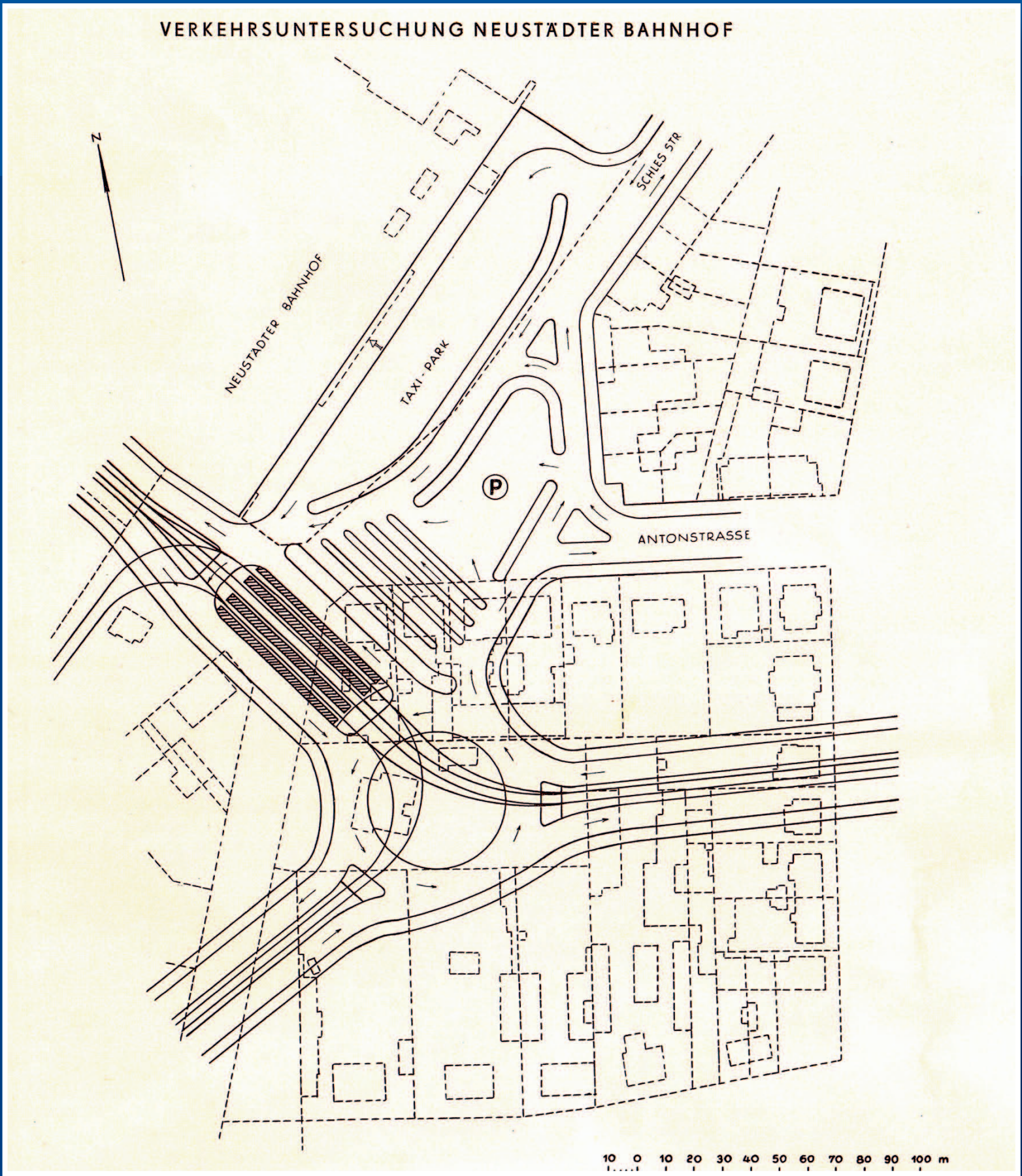
At the end of the 1940s the basic principles of the new plan were important for reconstruction.

The 1950s

The Transport Network - The Complete Picture and in Detail



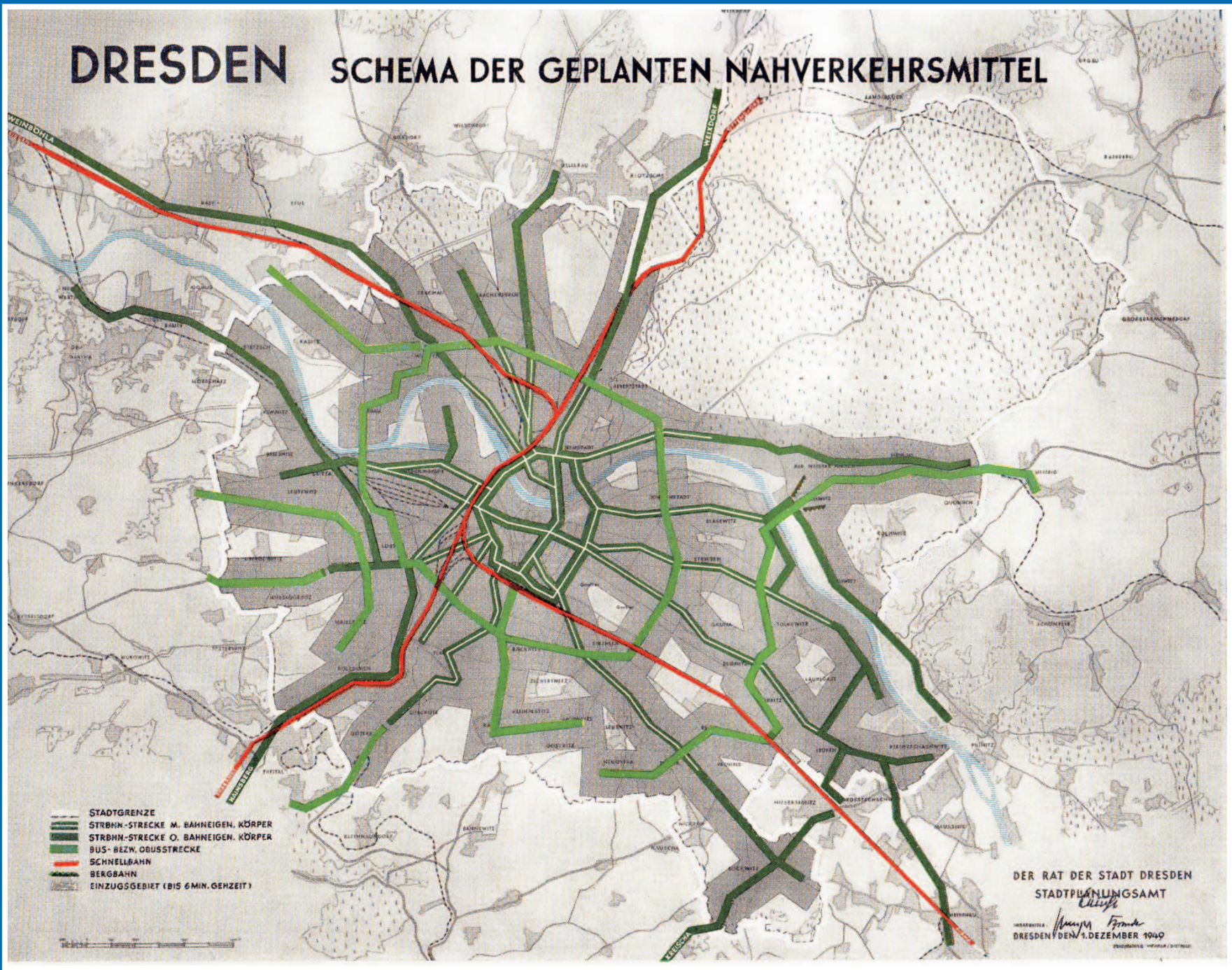
Detail plans for the creation of the transport and traffic system in Dresden. This is the junction 'Pirnaische Platz' as a roundabout solution.



Detail plans for the creation of the transport and traffic system in Dresden. Here is the 'Neustadt Train Station' with a roundabout and a central tram and bus station.



The Planned Main Road Network from the 1950s
A tangent-formed system can be noted which is complemented by a link road leading over the river Elbe west of the city's 26 ring (former 26 tram line).

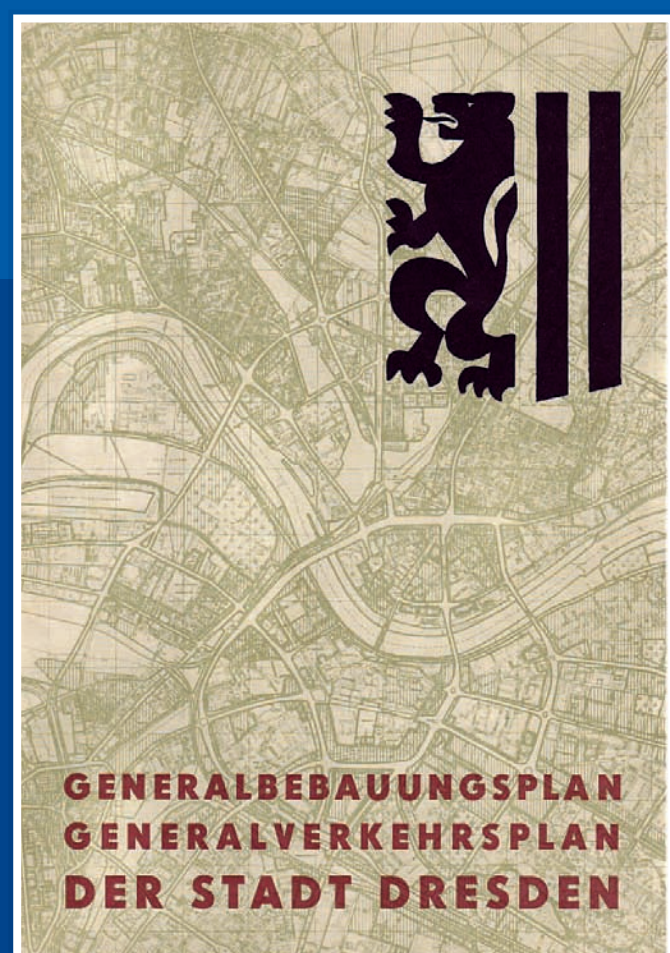


The conception for the local public transport system from the year 1947 as it was developed based on the route network of the Dresden transport company 'Dresdner Verkehrsgesellschaft AG'.

- › Coverage of the city by tram with all important connections and coming together at the '26 ring' (inner ring),
- › Popular routes perpendicular to the tram lines were to be served by a bus system (E.g. Neuostra – Blaues Wunder – Grundstraße – Weißig),
- › Conception of an outer ring road for buses.

The 1960s

The New Urban Development Policy in the Spirit of the Sixties



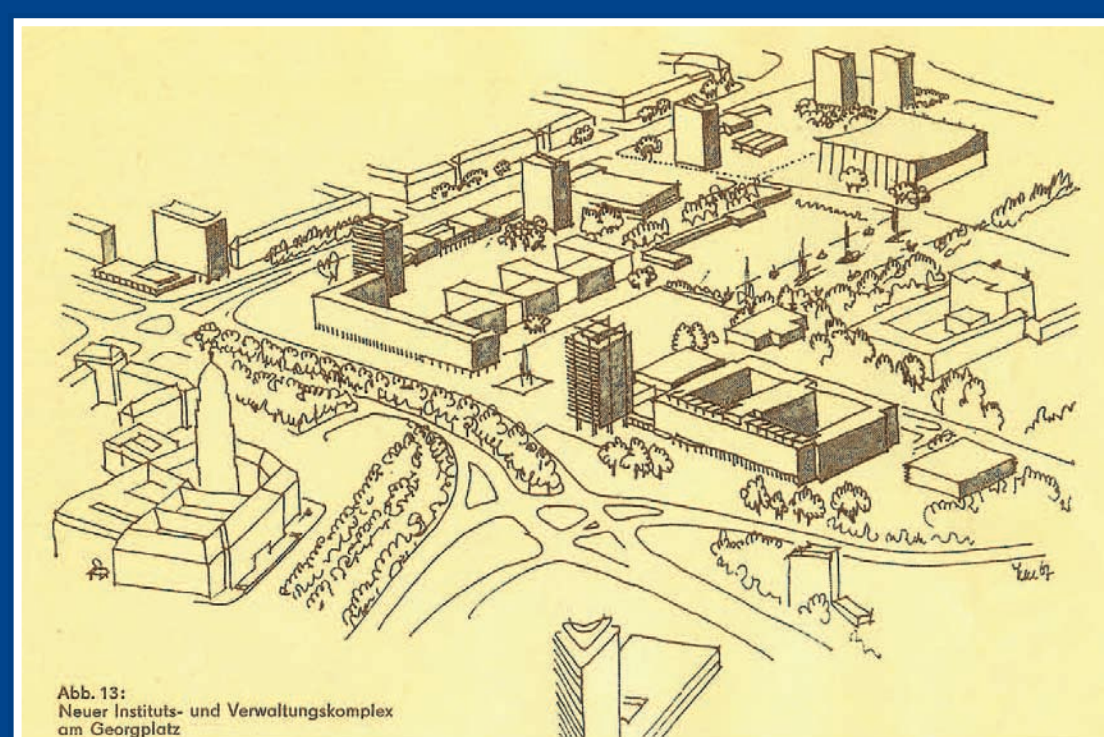
The transport conceptions from the 1960s known then as 'Generalverkehrsplan' (General Transport Plan) are based on a contemporary modern development and a traffic infrastructure orientated on the development of an increasing number of cars.

It is noteworthy that these two master plans, Urban and Transport Development, were combined.



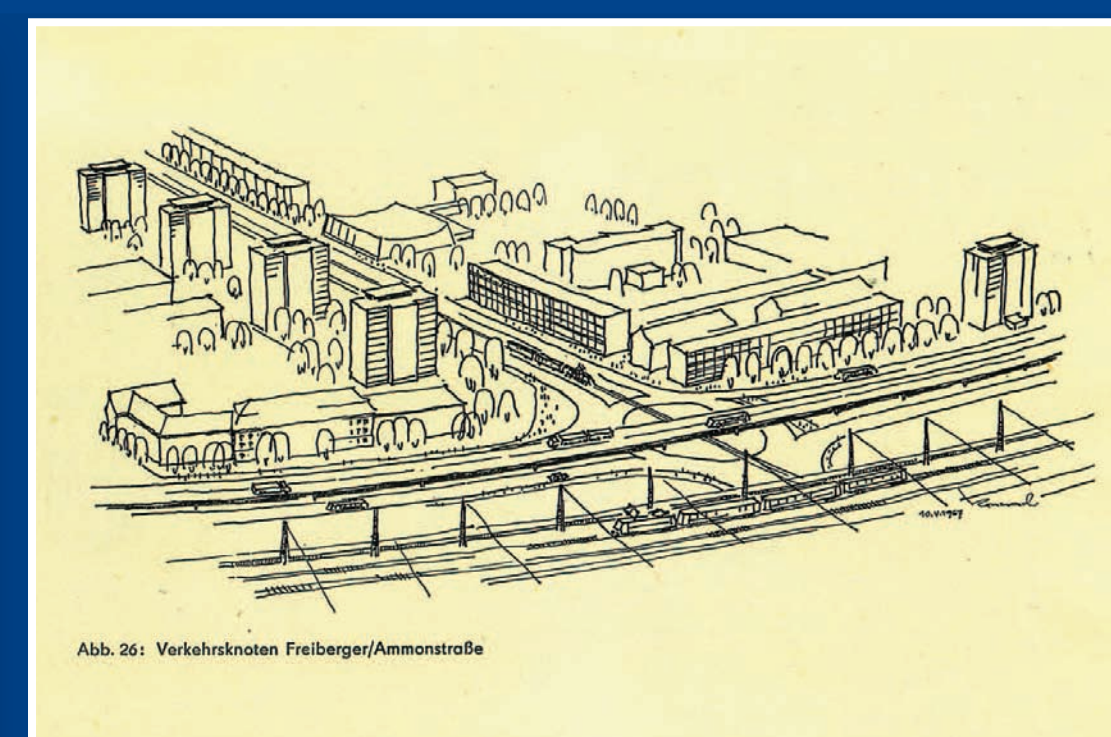
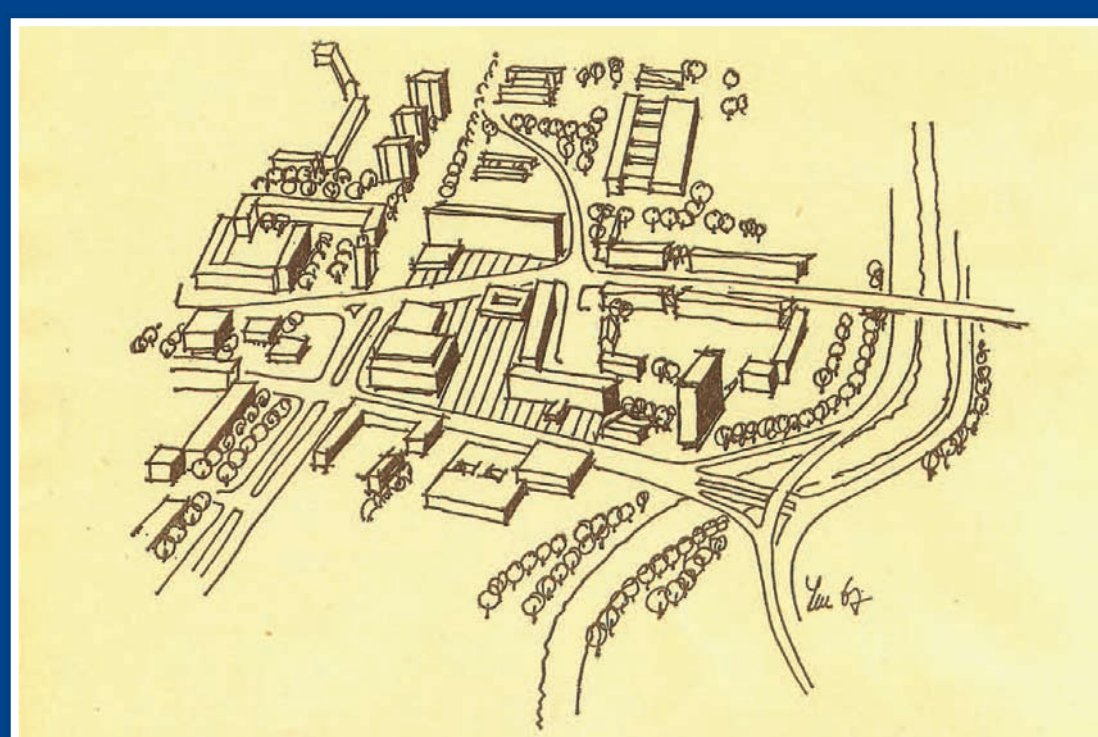
Plan for the Inner City Development 1967

Intentions for a broad extension of the main roads within the '26 ring' (inner ring) with the tramway in the centre of the road on an independent track formation its own track bed.



Building Visions in the Style of the Sixties

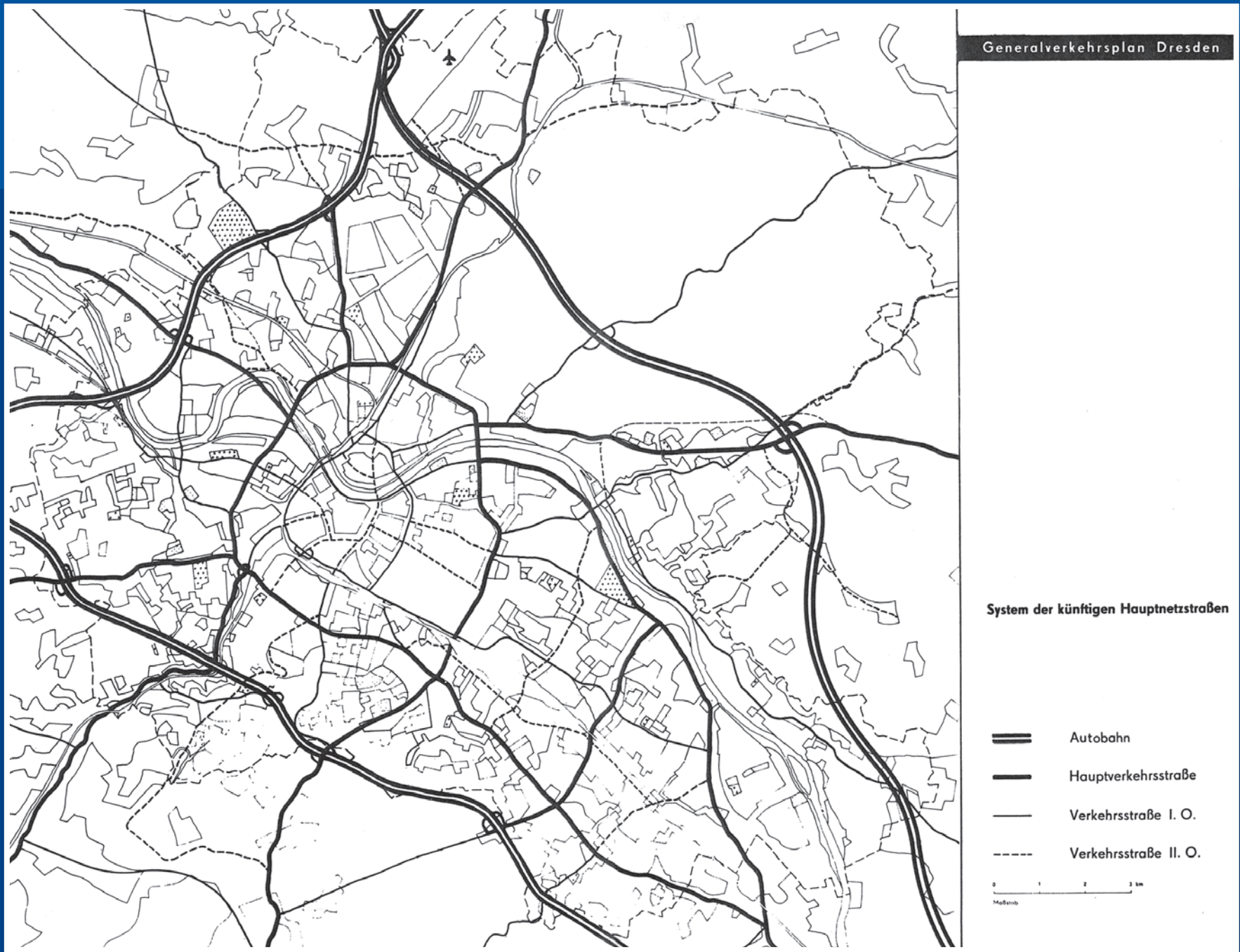
New Administration Complex at 'Georgplatz' opposite the City Hall as it was envisaged at the end of the sixties.



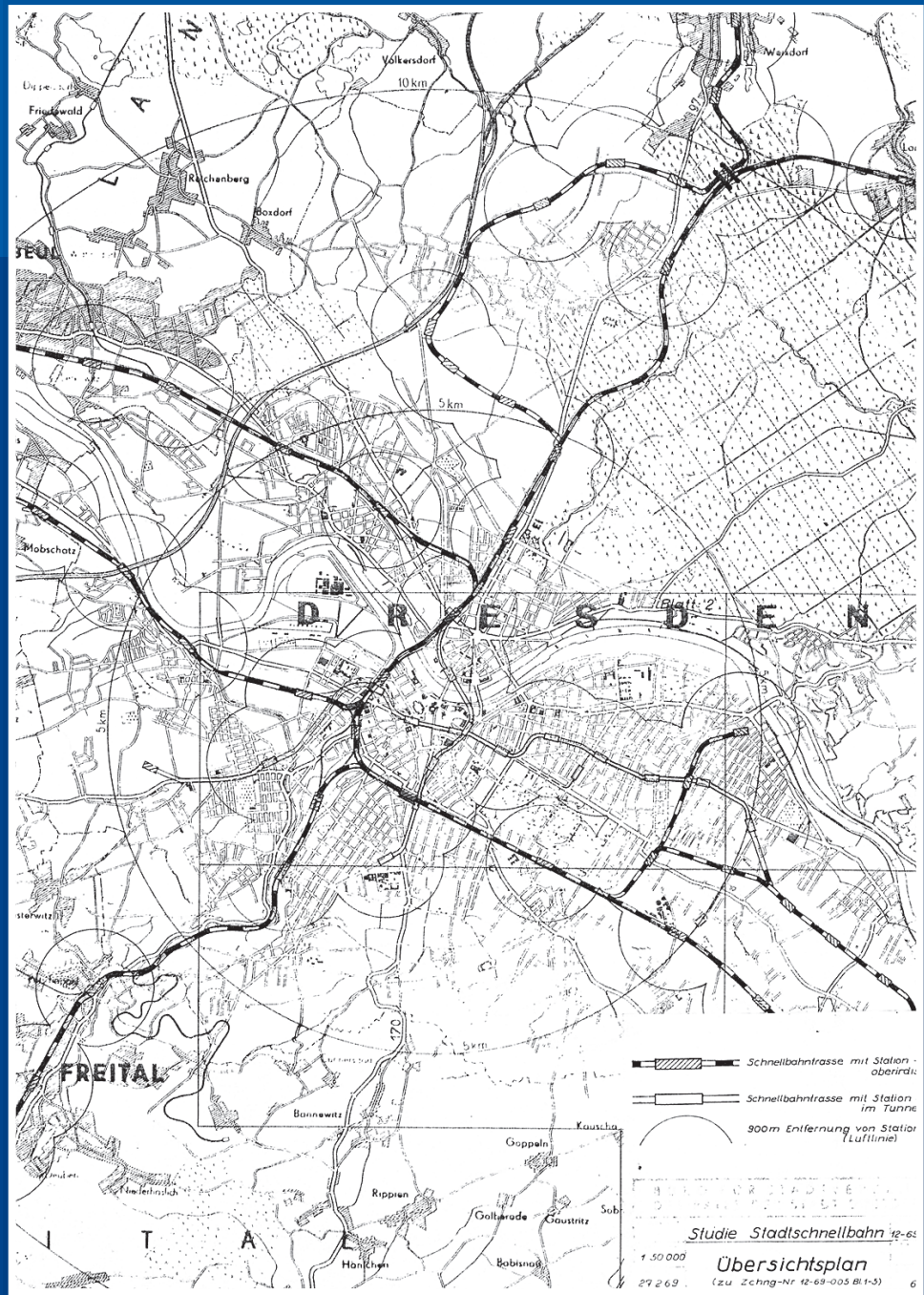
Analogous to the visions of the reconstruction of the so-called 'Urban District Centres' on 'Kesselsdorfer Straße' near 'Drei-Kaiser-Hof' and at the junction of Ammonstraße/Freiburger Straße. Such Urban District Centres had gained in importance to complement and support the inner city which was still suffering from the heavy destruction. The planning philosophy of this year is clearly recognisable: Widely spread apart prefabricated blocks of flats aligned with the traffic routes on several levels.

The 1960s

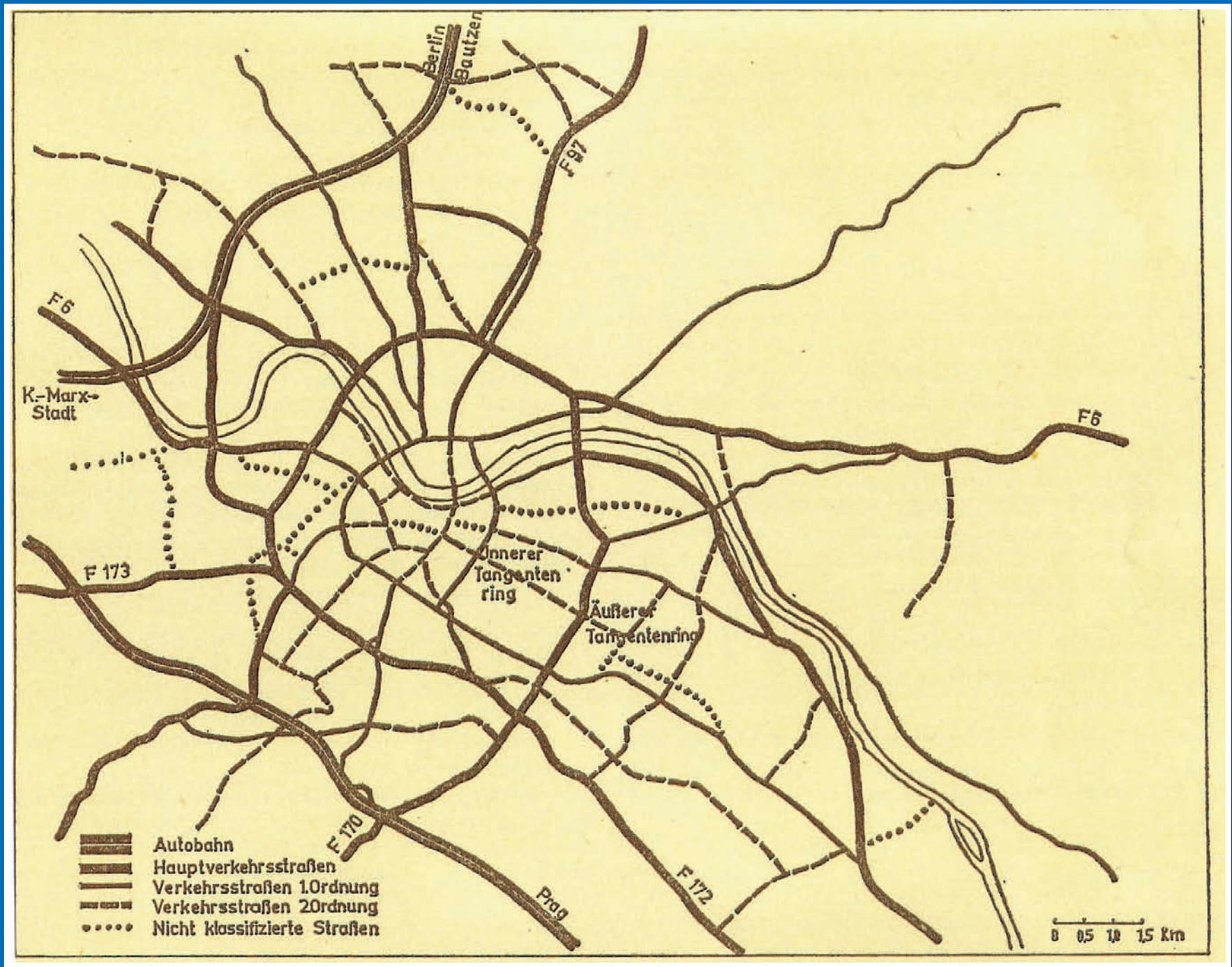
The Traffic Networks - As a Whole and Different Variation



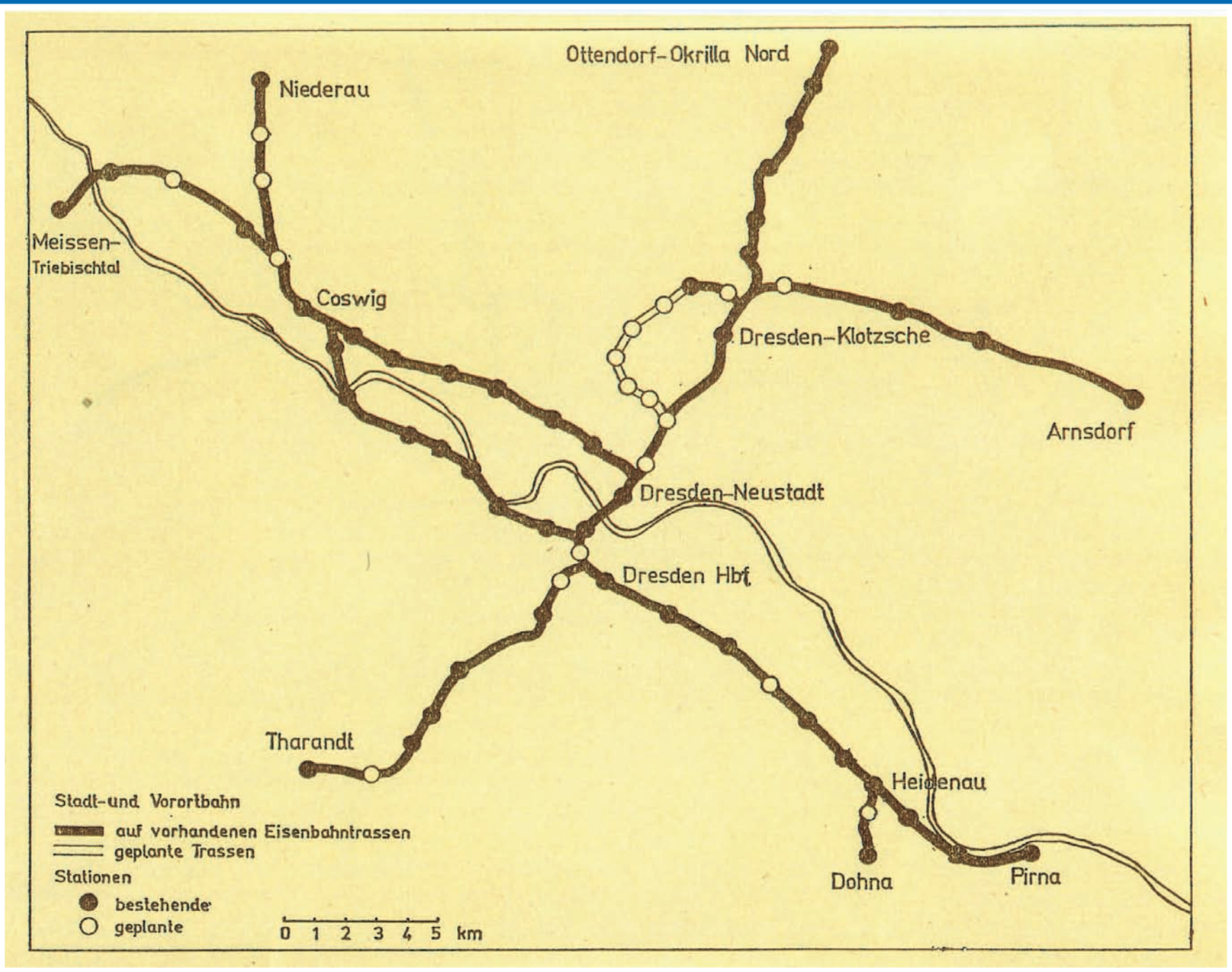
Visions of a future main road network from the year 1967: One of the versions envisioned a motorway right across the wooded area called 'Dresden Heide'.



Visions of a future rail transit system at the end of the sixties: One of the ideas was a partly underground tram or urban railway network. An expansion of the urban railway above ground was also considered (see line coming from the South to Loschwitz).



The Planned Main Road Network from the 1960s. A classical ring system consisting of an outer and inner ring road can be identified. The in-coming tangents (main roads) lead up to the outer ring road where the traffic should be redistributed.



The conception for the local public transport included the development of the tram and bus system as well as an extension of the urban-suburban commuter railway.

- › The so-called 'Hellerschleife' (Hellerau Loop) can be seen: a connection between the Dresden airport and 'Neustadt' train station in a westward curve which should enable even main-line trains to access the airport.
- › It is also possible to recognise planned stops (e.g. Grenzstraße, Freiburger Straße); some of them can be seen in reality today, almost 40 years later.

The 1970s

Urban Development and Transport and Traffic in the Spirit of the Seventies



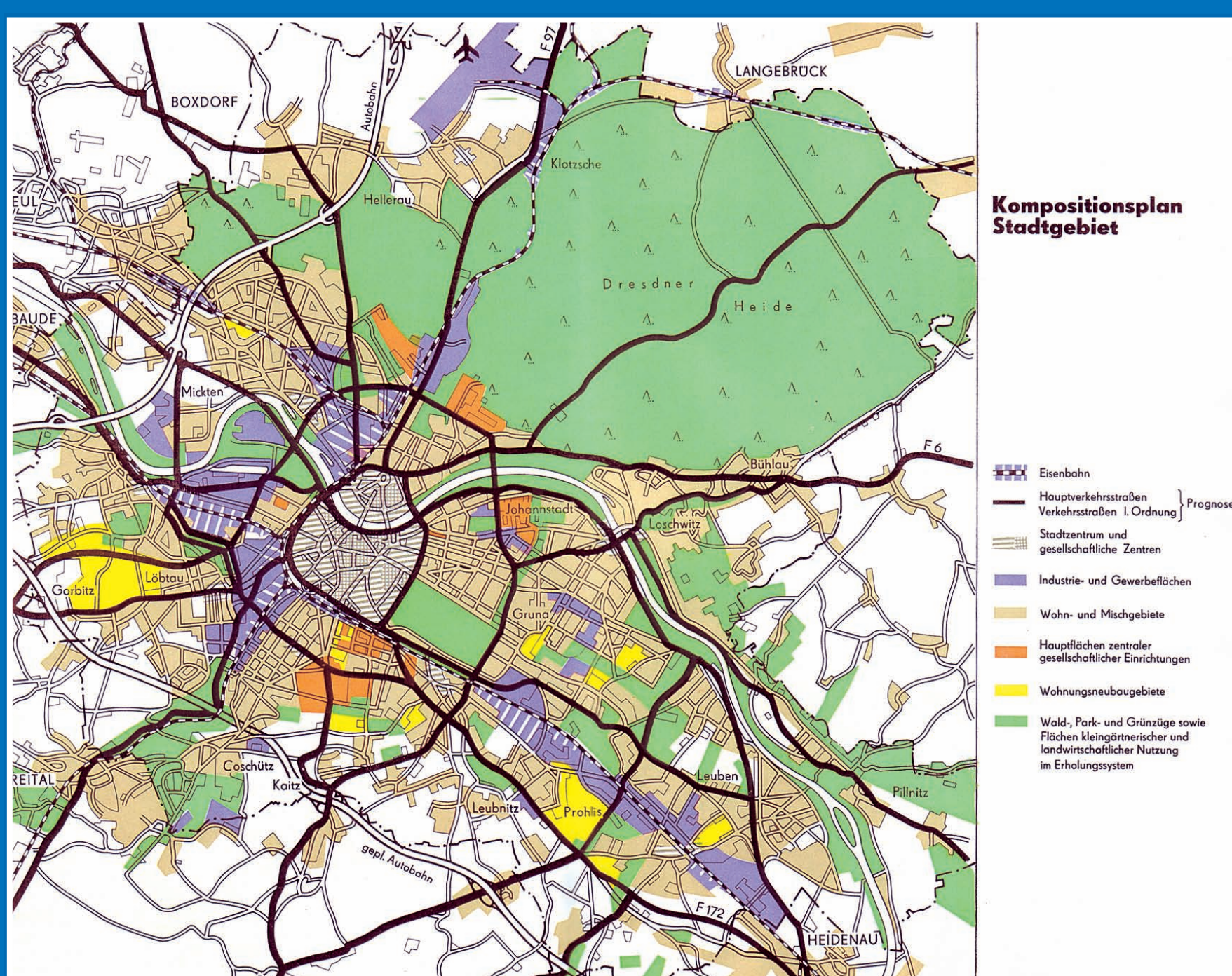
The transport conceptions of the 1970s, published at that time under the title 'Generalverkehrsplan (General Transport Plan) 1977', arose out of the 1960s modern city and transport construction strategies. Large areas of prefabs had already grown in the inner city area and building of more was in progress: towards the end of this decade the extension of the city including the council housing estates of prefabricated blocks of flats began (Gorbitz, Prohlis). This meant that above all the development of more effective transport connections, in particular on the basis of the local public transport (urban-suburban commuter railway, tram and bus).



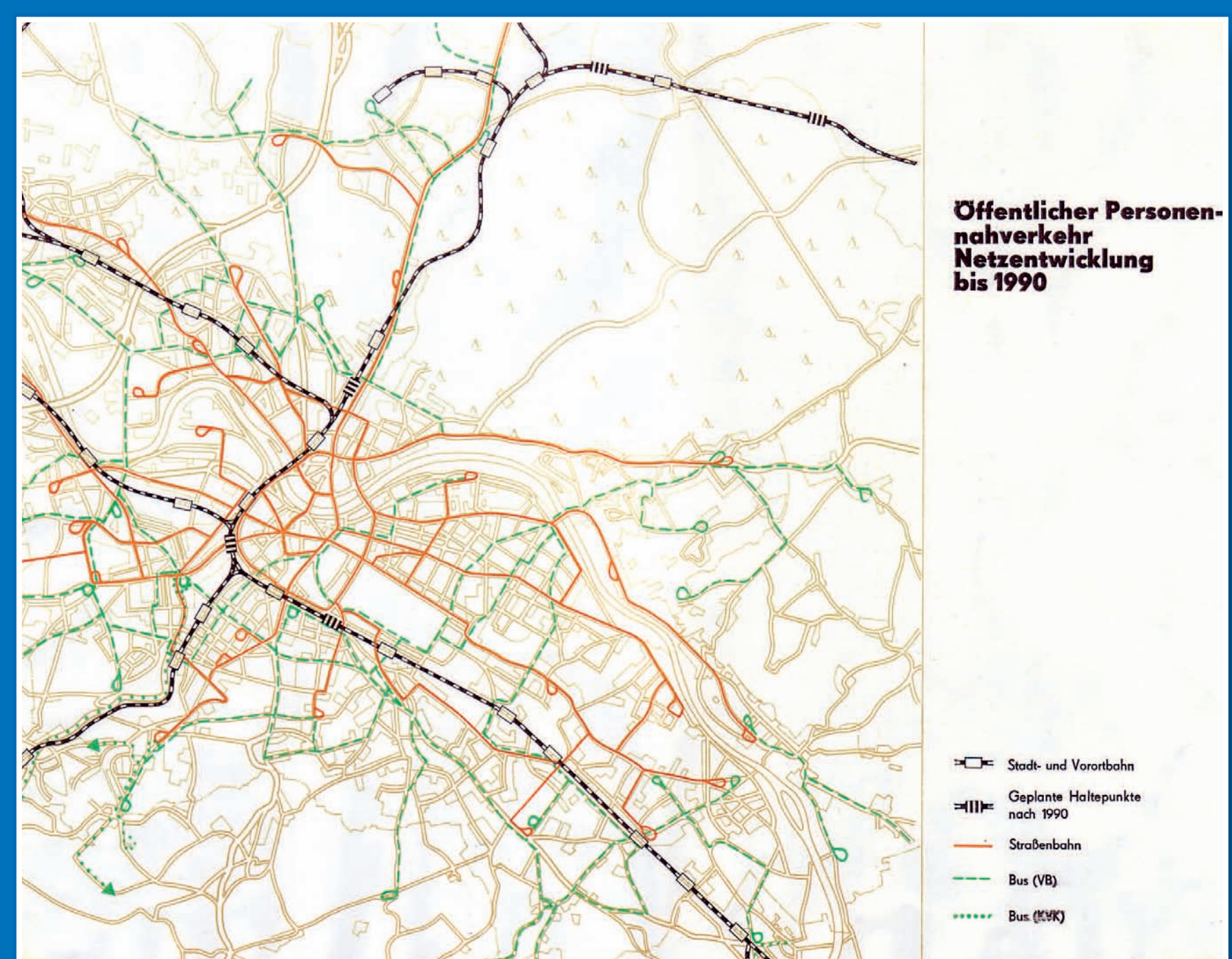
Urban development area at today's Albertstraße (Sarasanistraße) in the seventies.



The ideas from the fifties and sixties for large dimensioned transport systems were partly realised around 1970, and can be seen here by the example of the transport hub at Pirnaischer Platz.

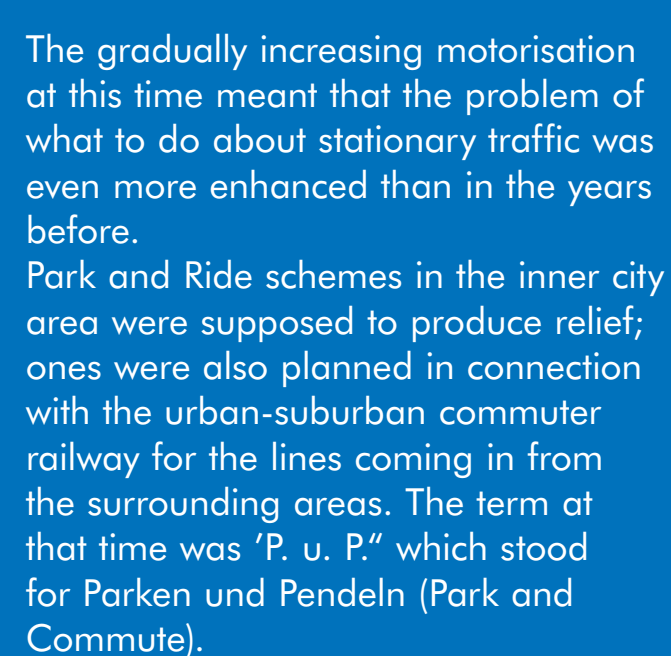
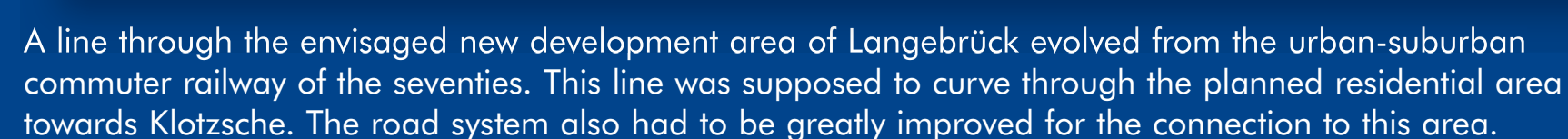


In the draft of the future main road network for the city district Dresden from the seventies the continuation of the design notions for a ring system (outer and inner ring) where radial roads converge can clearly be seen. A special point of interest: The plan included a relief road for the bridge 'Blaues Wunder' along the street Kretschmerstraße.



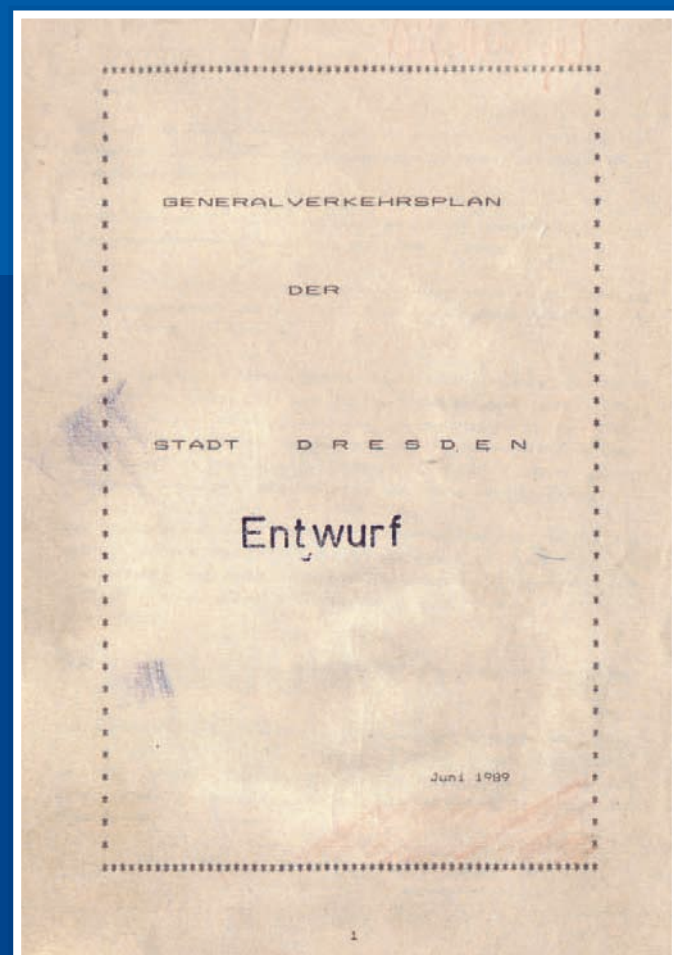
The conception for the local public transport was aimed at the construction of a comprehensive system made up of urban-suburban commuter railway and tram complemented by bus.

Connecting the Estates of Prefabricated Blocks of Flats and Concepts for Stationary Traffic



The 1980s

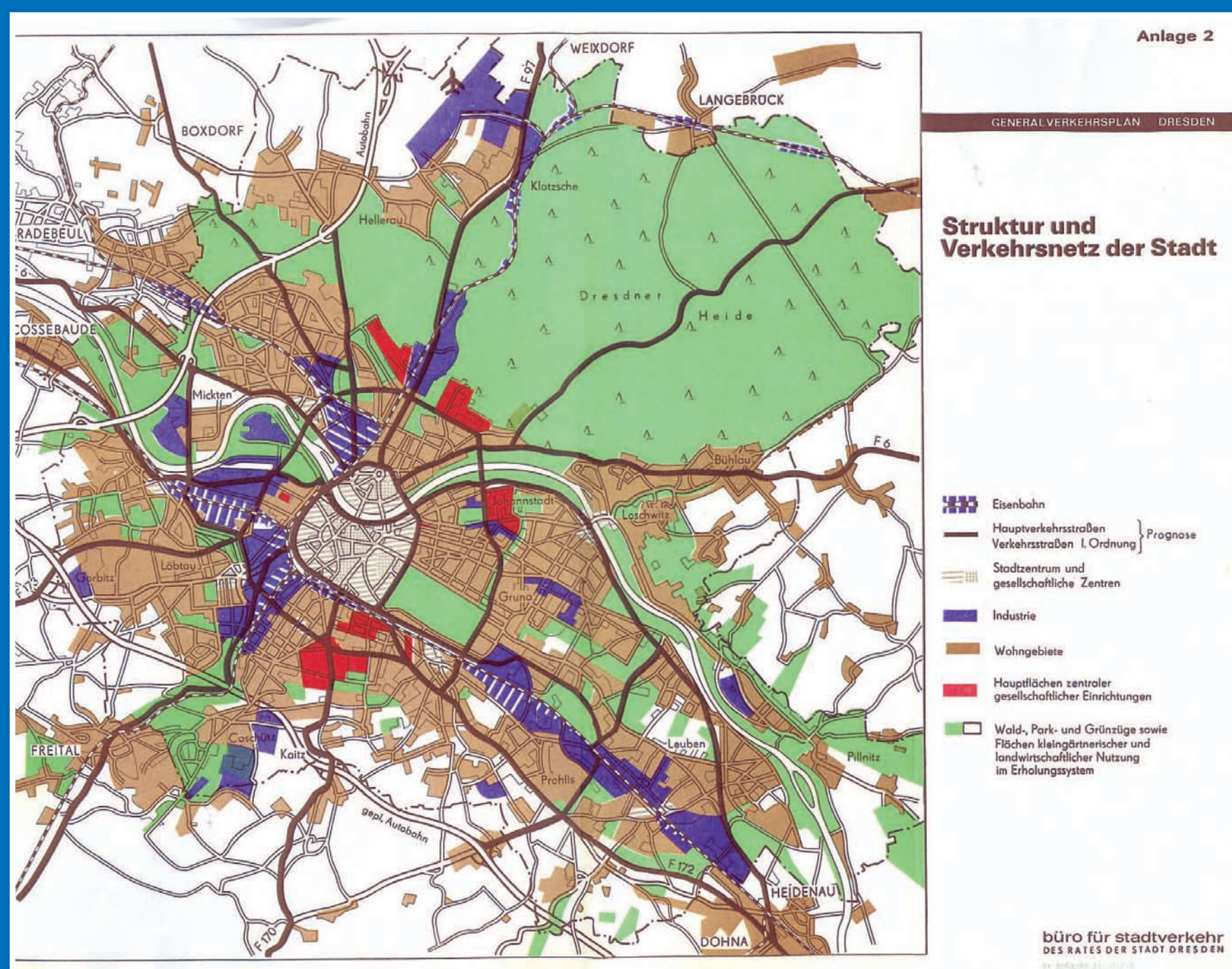
Urban Development and Traffic and Transport in the Spirit of the Eighties



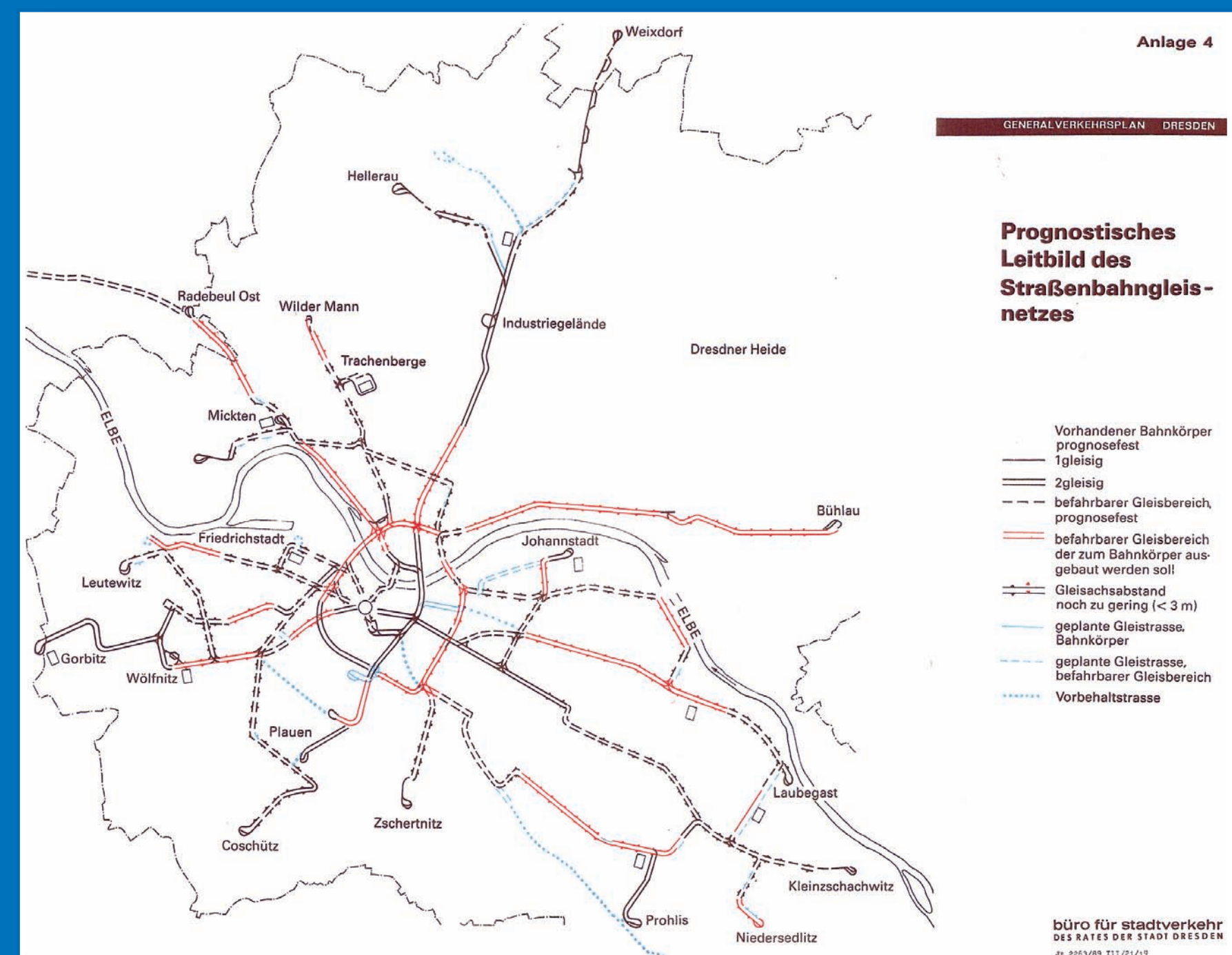
The transport conceptions of the eighties can, from today's point of view, be seen as a continuation of the fundamental approach laid down in the seventies. However, economic and political difficulties from the GDR system that were already evident in this decade caused the originally planned extensive transport and traffic solutions (many of which were to be on two levels) to sink into the background. To the fore came a cost saving upgrading of the existing networks, the transport organisation and the combination of the different means of transport to a complete functioning system. It is also obvious that traffic and transport specialists as well as local people took up different topics and discussed them in more depth.

More intensely deliberated at this time were bicycle traffic and the freedom of movement for disabled people.

The political change, without a doubt, casts its shadow, including over transport planning, even before the end of the eighties. The master plan of 1989, the finished draft of the traffic and transport conception which should have been the foundation for further development of the Dresden transport system in the nineties was made obsolete by the fall of the GDR and was never published.



The future main road network of the city district of Dresden in the eighties. The retention of a ring-system (outer and inner ring) is visible.



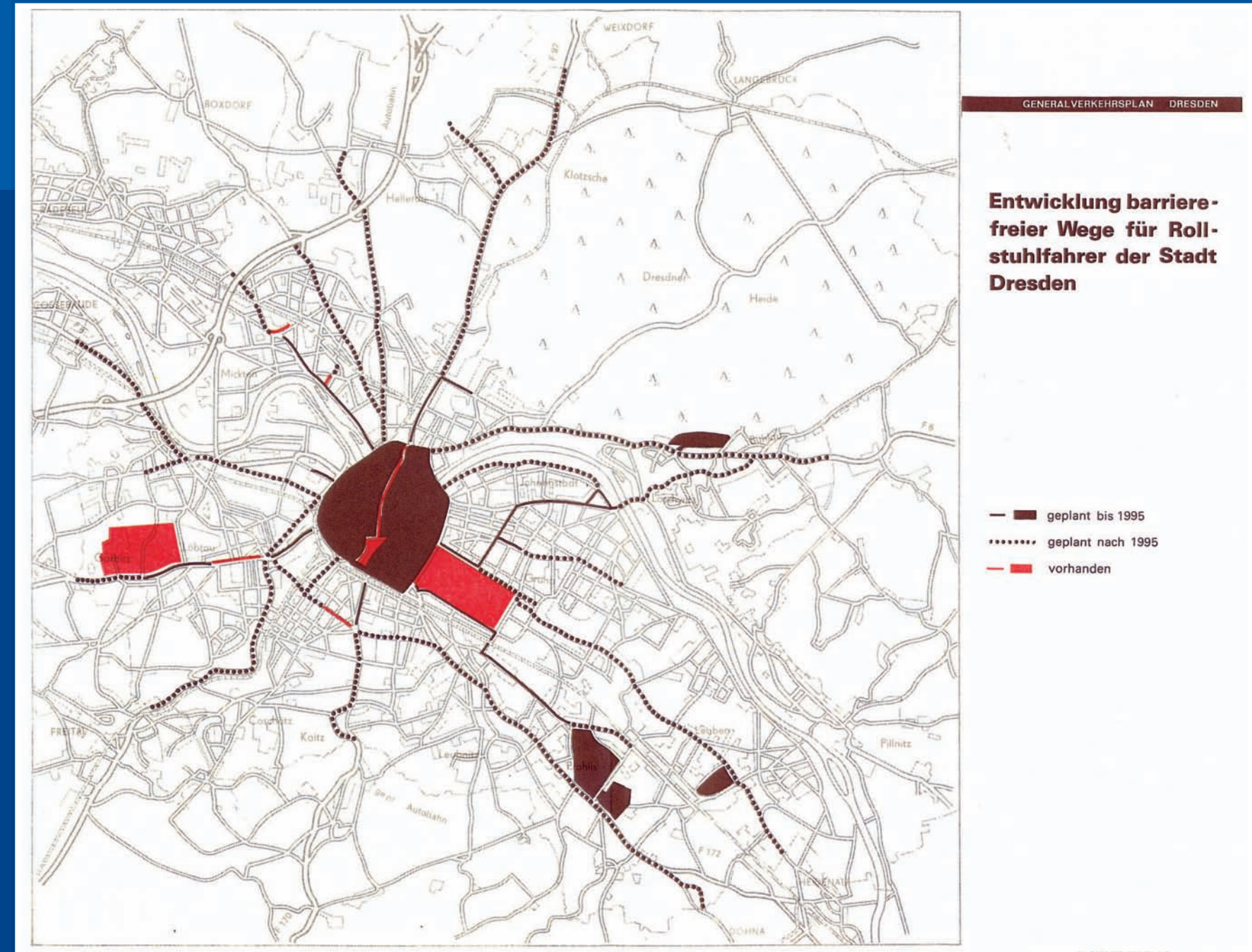
The concept for the local public transport was earmarked for substantial expansion plans, in particular in the area of rail-bound public transport. Trams lines are marked, for example, going to Johannstadt and as replacement for popular bus routes (including along Dohnaer Straße).

The 1980s

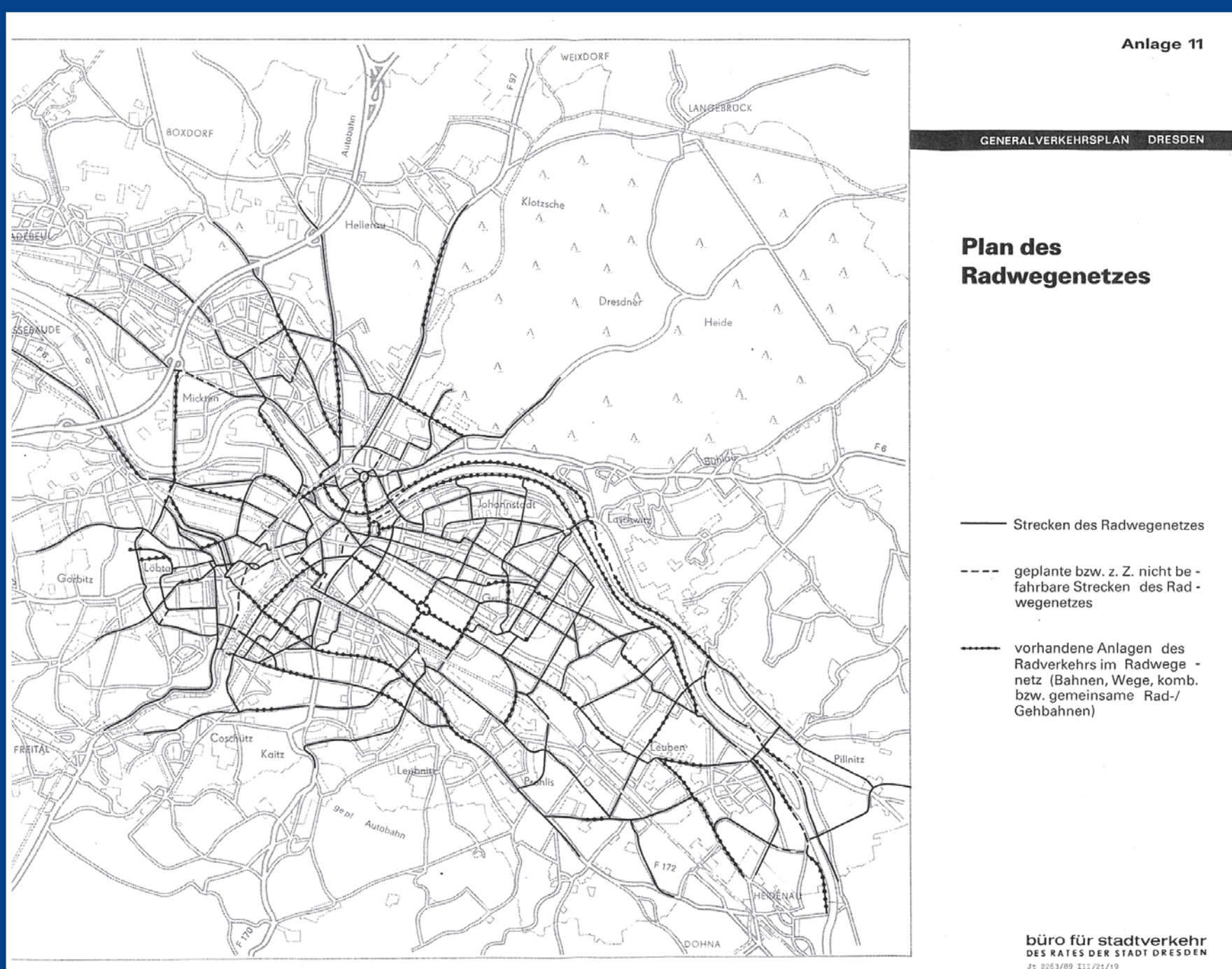
Sectoral Concepts of Traffic and Transport Planning



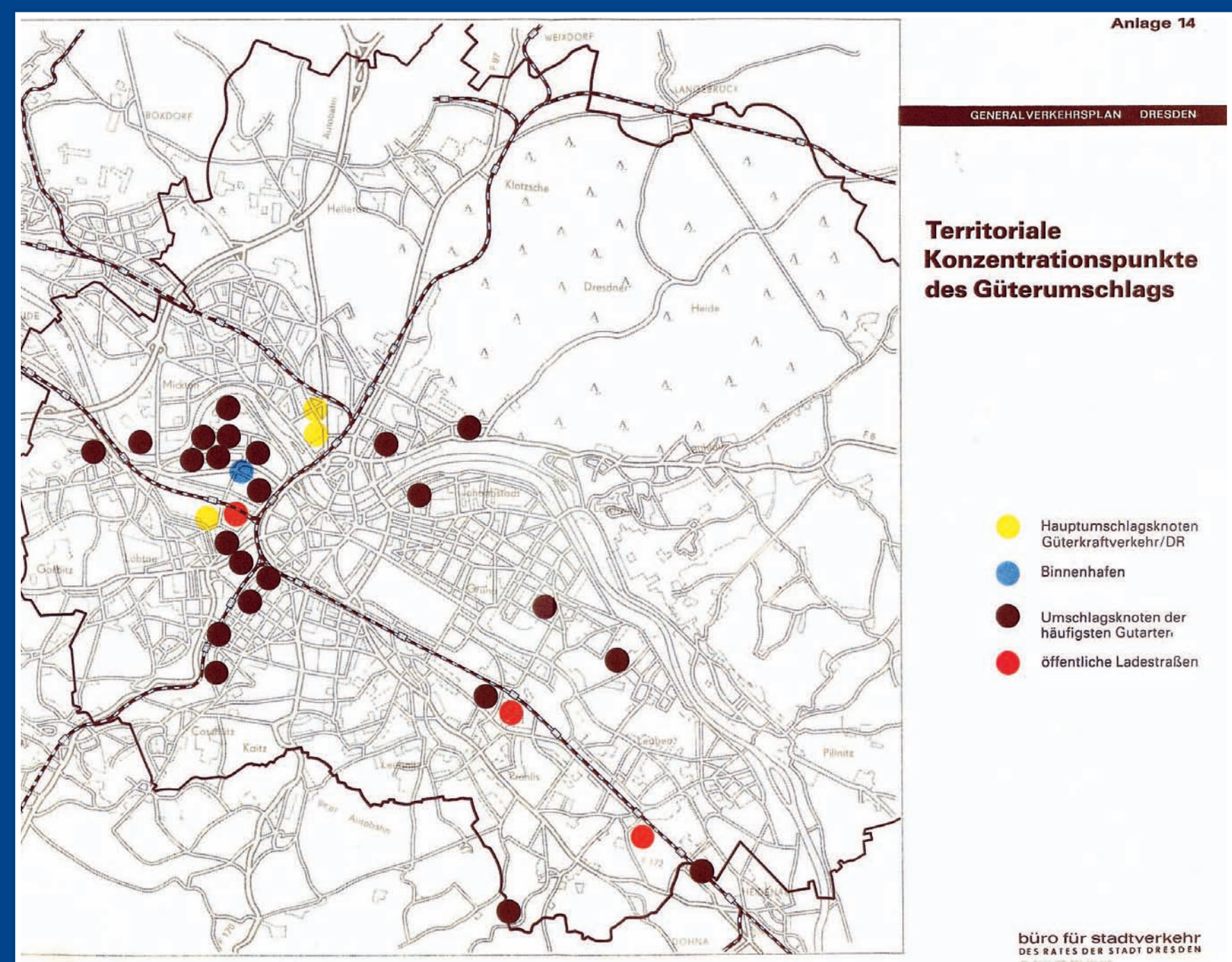
Traffic going over the bridge 'Carolabrücke' at end of the seventies/ beginning of the eighties as viewed from the South.



The needs of disabled people are not to be forgotten in the design of a transport infrastructure in modern transport planning. In the draft of the master plan for transport this topic played an important role.



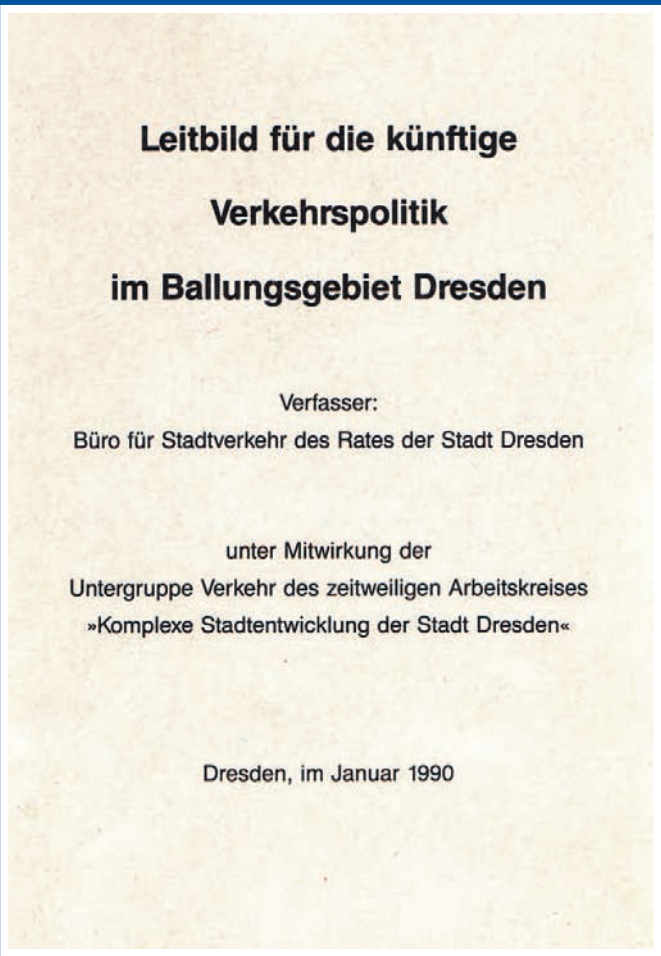
The bicycle traffic also gained in importance in the 1989 version of the master plan for transport.



The 'Location of the concentration of the cargo handling points' can be seen in one way as a predecessor to today's Freight Villages. It is worth noting the concentration of the cargo handling points in Dresden-Friedrichstadt (Today: The location of the Freight Village 'Dresden-Friedrichstadt (GVZ)')

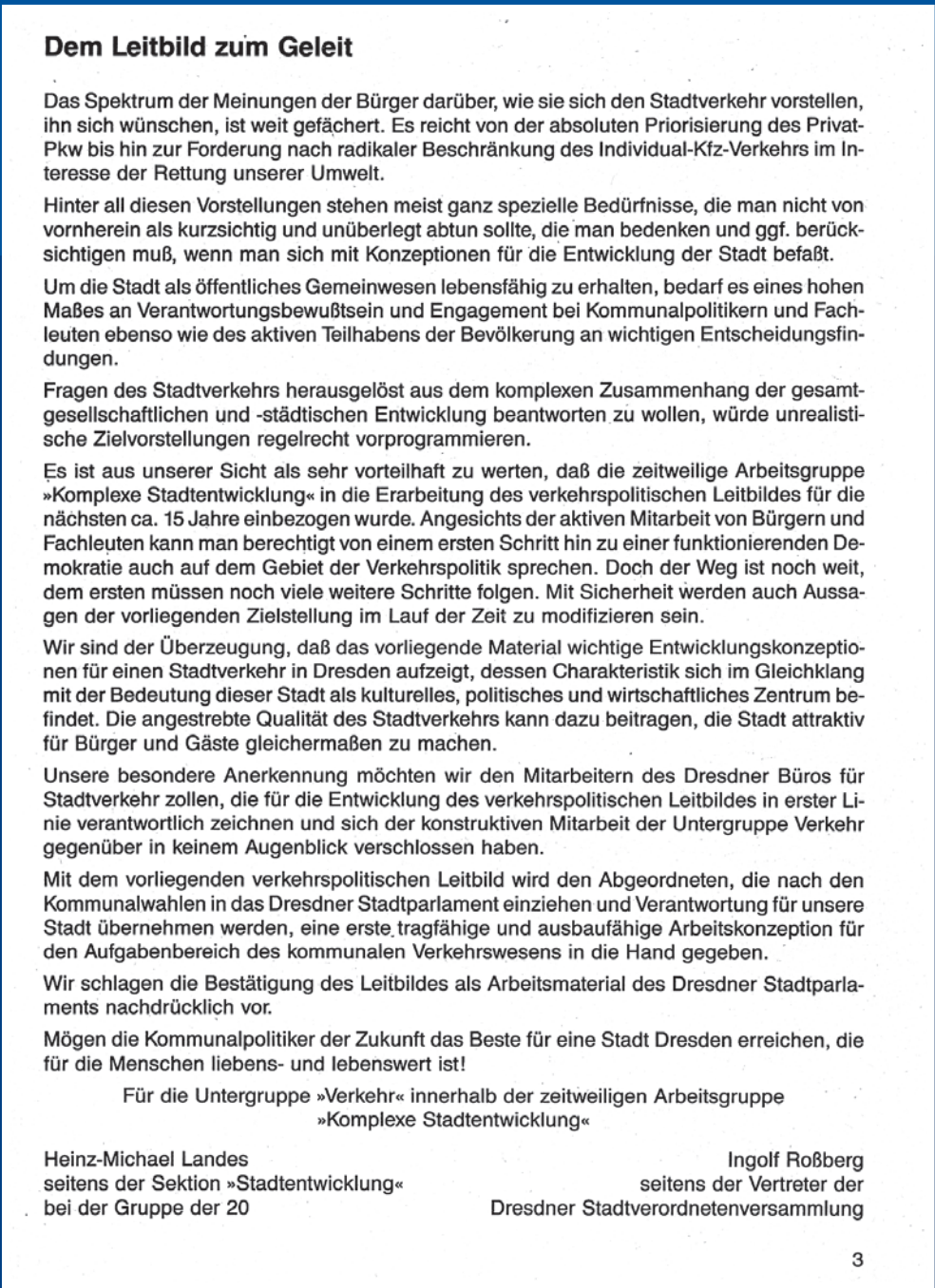
The 1990s

Traffic and Transport Concepts from the Nineties

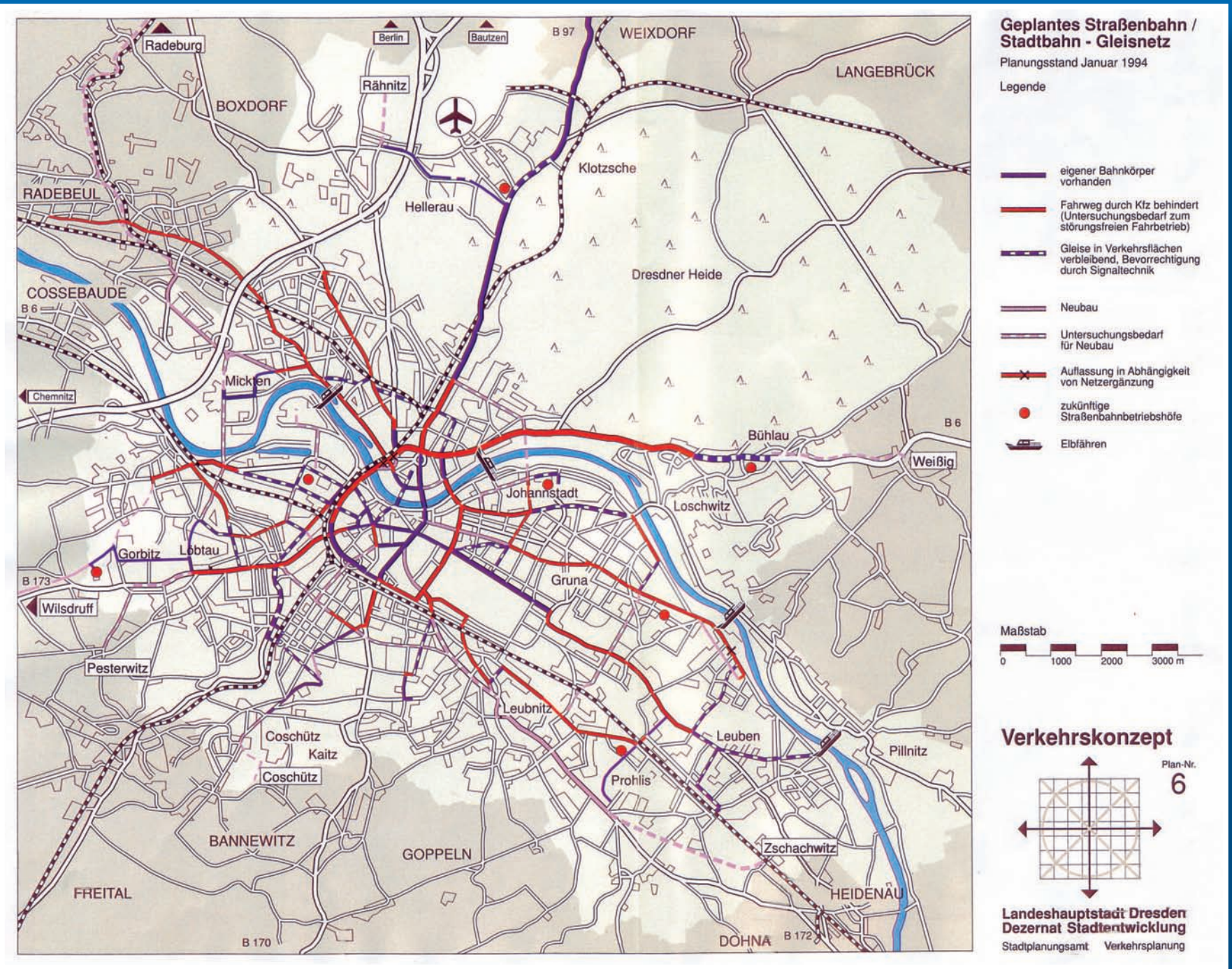
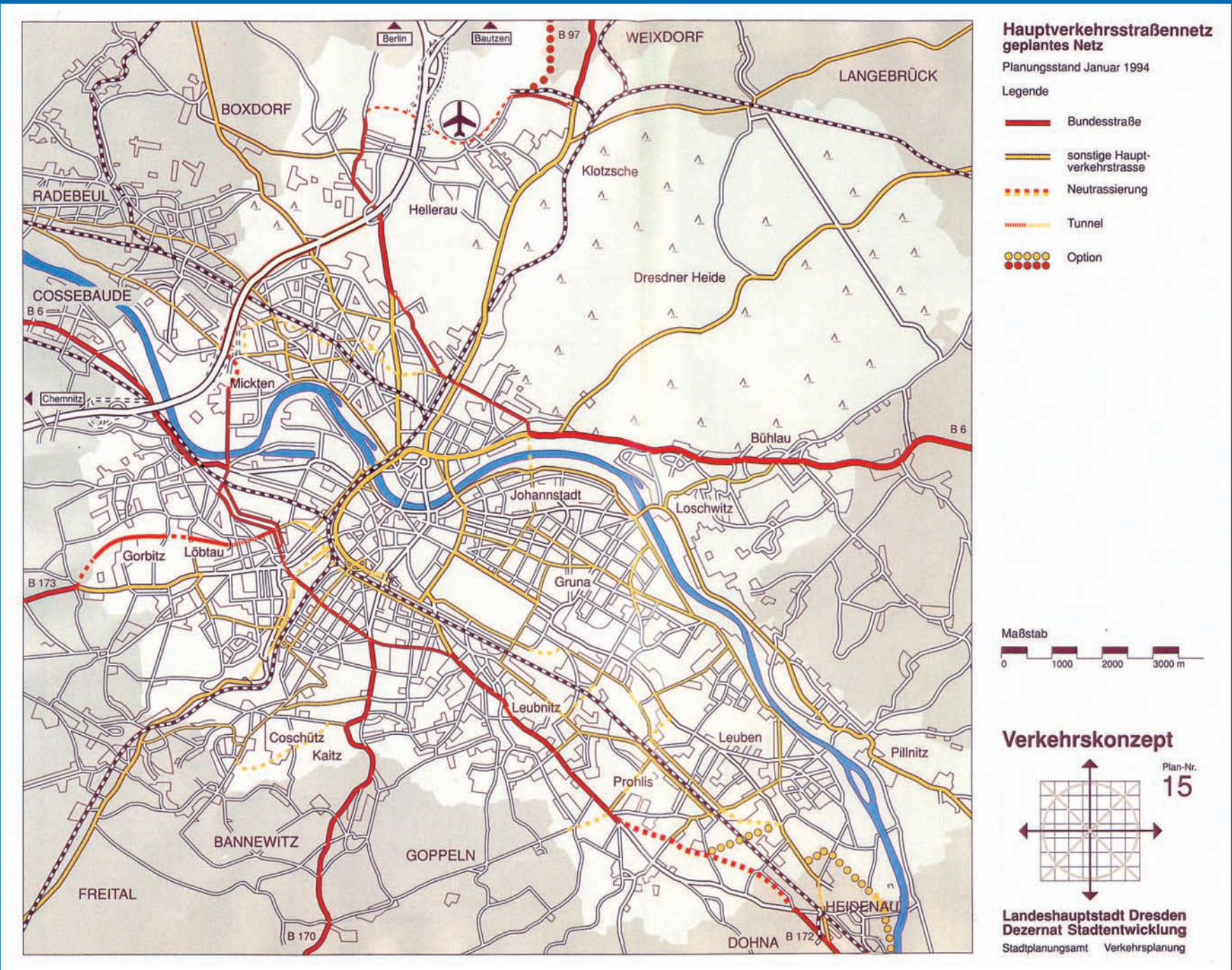


The new start of the transport policy after the political change is marked by a democratic ‘turn’ unparalleled in the history of Germany to date. It was the time of the ‘Round Tables’ (also in transport planning), in which the citizens, including the scientists and specialists from all branches among them, took the destiny of the city into their own hands.

The first transport concept after the change, the so-called ‘Leitbild für die Verkehrspolitik im Ballungsgebiet Dresden’ (Overall concept for the transport policy in the conurbation of Dresden), was drawn up at such a ‘round table talk’ and stands for a new start, democracy and the will of the people. In the following years this was the basis for the creation of the Dresden Transport Concept which was passed in 1994 by the City Council (in those days still called: City Council Assembly). Even the draft of the transport concept was published and discussed with the general public. Numerous events and dialogues accompanied the concept on its way to enactment.



The preface to the ‘Overall concept for the transport policy in the conurbation of Dresden’ speaks for itself. This inconspicuous material in its printed version became the seed for the transport concept of 1994. The ‘Transport Policy Objective’ which resulted from the ‘Transport Round Table’ – as you might call it from today’s point of view – was integrated into the transport concept from 1994 and was refined in the course of the preceding discussions to become the ‘1994 Transport Concept’.



The planned main road network from the 1994 transport concept which has meanwhile been continued in Dresden’s Land Use Plan from 1998 and in the ‘Integrated City Development Concept (INSEK) 2002.

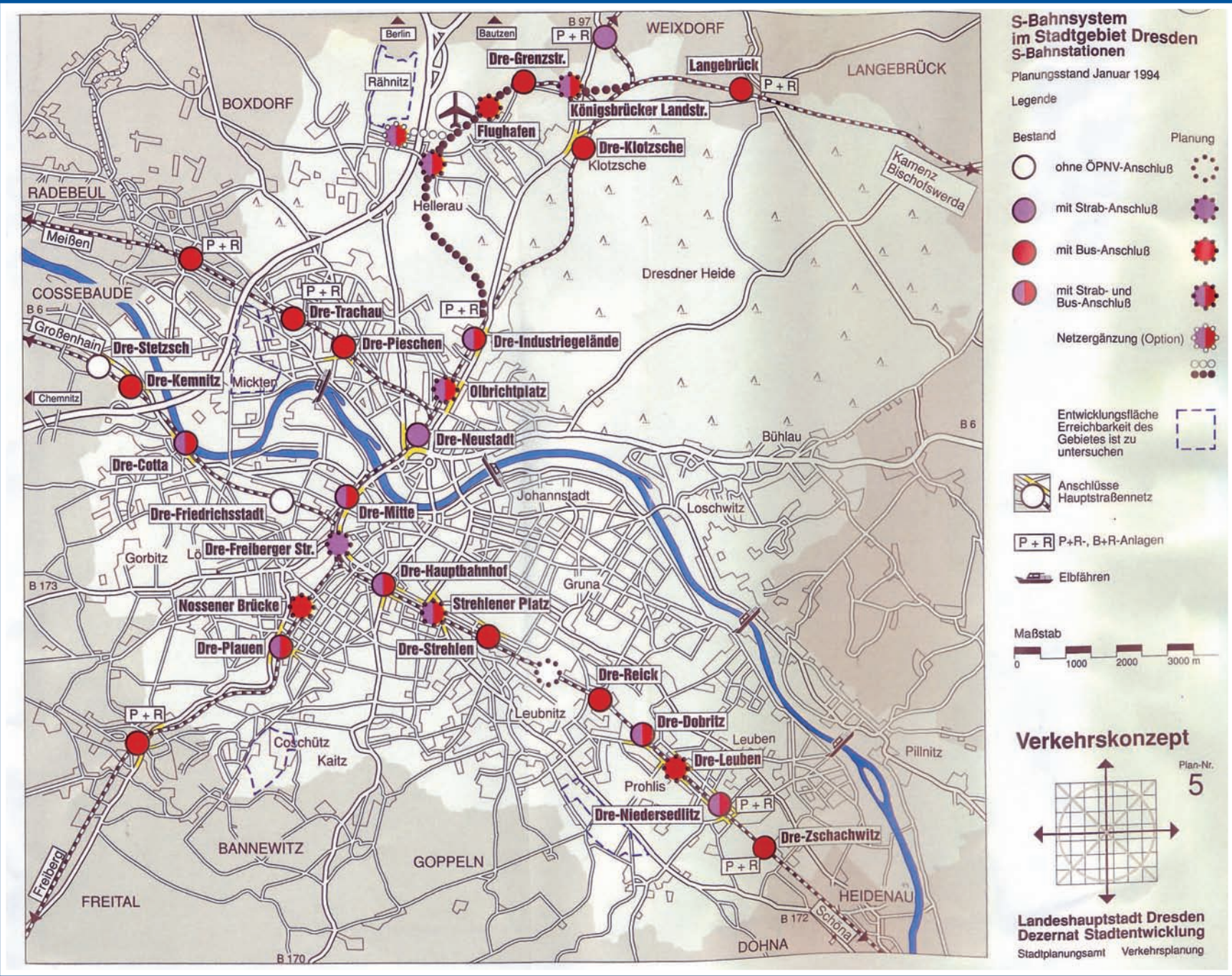
- › Here the turn away from the ring system to a tangential system with branchlike connections, similar to the vision from the beginning of the 1950s can be seen.
- › The A 17 motorway running near the city was not part of the long-term planning of this traffic concept; here again the will of the people was the deciding factor (see public referendum) for the later inclusion of this important tangent for the long-distance traffic in the concept that was carried forward for the main road network.

Planned Rail Network for the Local Public Transport from the Transport Concept of 1994

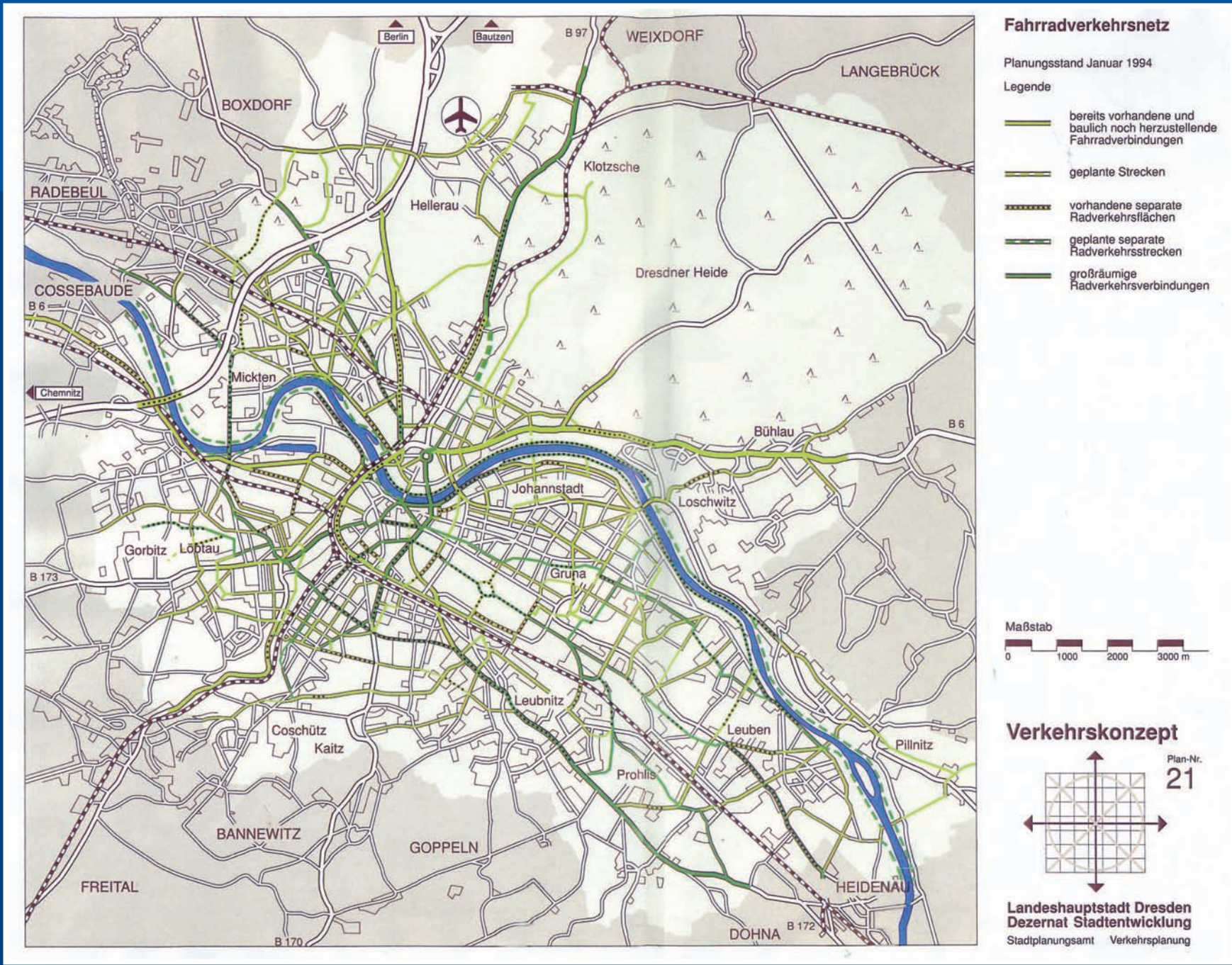
The expansion of the network of tram lines and its improvement as well as the acceleration of public transport by, for example, giving it priority over private transport are central topics of the 1994 transport concept.

The 1990s

Transport Networks - Reflection after their Implementation



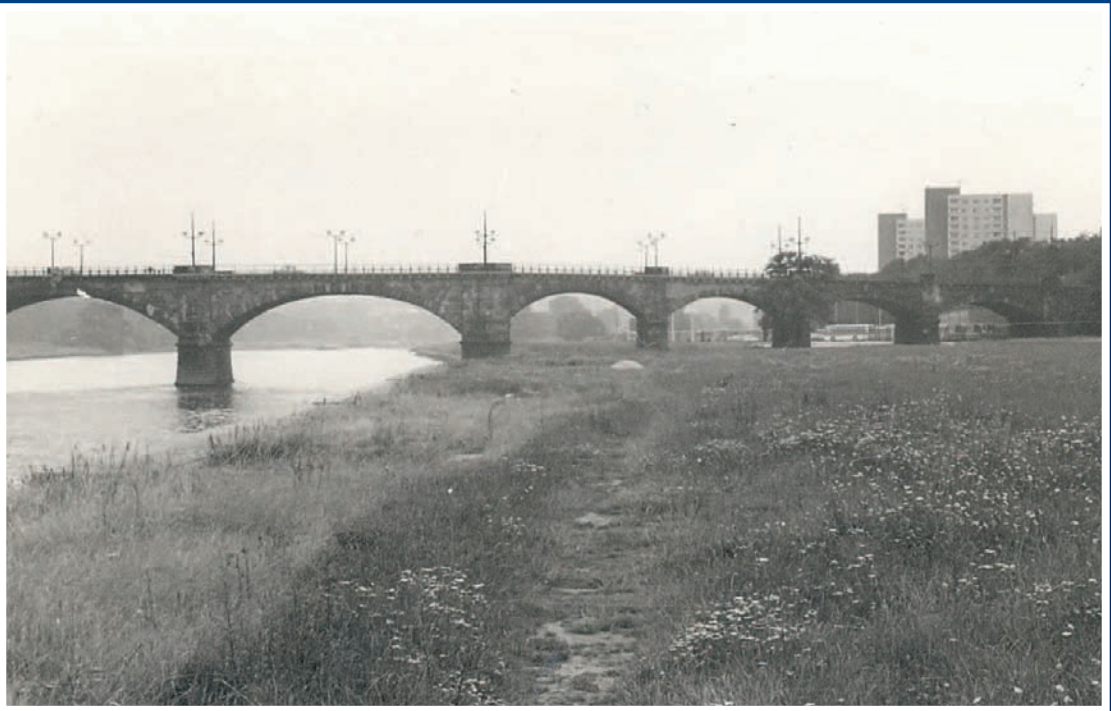
Planned network of the interfaces in local public transport including new stations for the urban-suburban commuter railway.



Planned cycle path network as presented in the transport concept from 1994.



The Urban-suburban Commuter Railway Station 'Dresden Reick'
Above: The platform before reconstruction
Below: The whole complex with Park and Ride as well as Bike and Ride



Elbe Cycle Path on the 'Altstadt' Side Looking East
Above: Before construction
Below: After construction



Elbe Cycle Path at Schillerplatz
Above: Before construction
Below: After construction

The Present

Transport Conceptions in the First Decade of the 21st Century



The Transport Concept of 1994 has been carried forward since it was passed in the year 1994. This means its continuation can be found in the Land Use Plan from 1998 (Plans 5.1 und 5.2) as well as in the 'Integrated City Development Concept (INSEK) 2002. Besides these, a row of sectoral concepts were developed and passed by the city council. Examples of such concepts include:

- › The Park and Ride Concept
- › The Concept of Coach Park and Guidance System

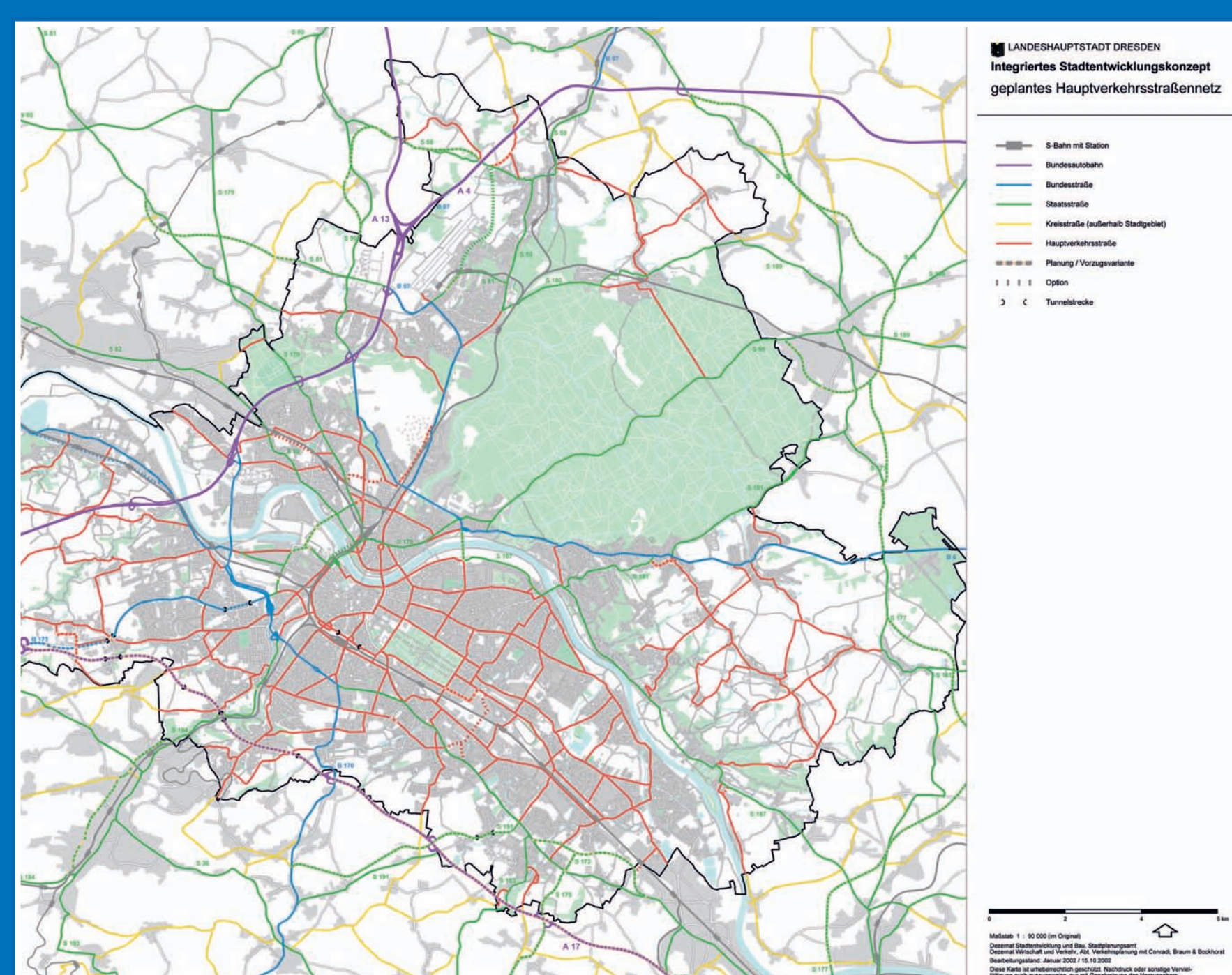
The updating of the Transport Concept from 1994 has been on the agenda since 2003 and it is being continued with the preparation of the Dresden Transport Development Plan, taking into consideration new conceptual formulations (E.g. Decisions made by the City Council about bicycle traffic or the 'Clean Air Plan').



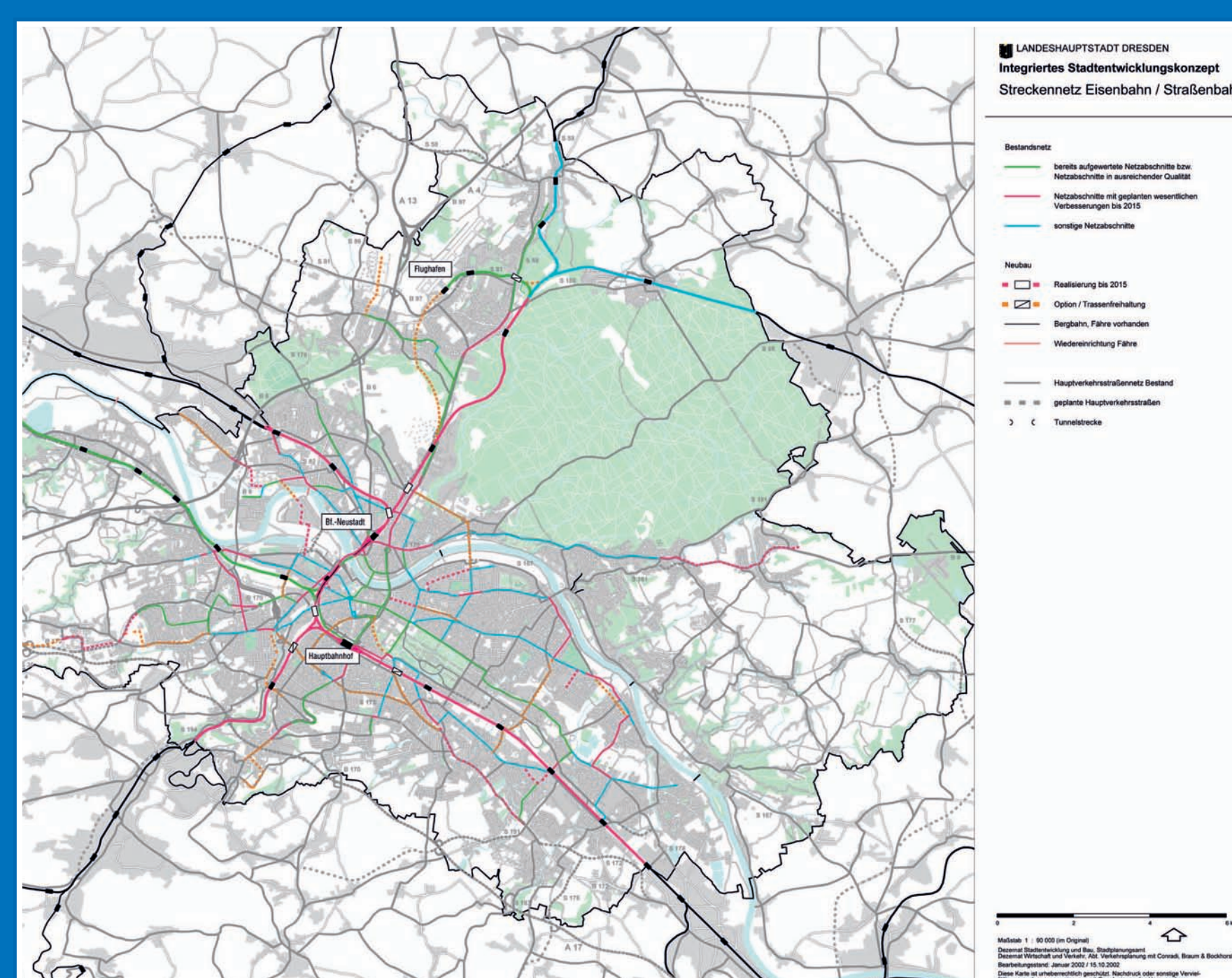
The Park and Ride Concept envisages bike parks at the stations. Here you can see the bike park for the train station at Klotzsche.



The Coach Park and Guidance System follows a decentralised systems of coach parks. Here is the coach park under the bridge 'Carolabrücke'.



The planned main road network in the Integrated City Development Concept 2002 has been adopted for the draft of the transport concept



The planned rail line network in the Integrated City Development Concept from 2002 has been adopted for the draft of the transport concept.

The Present

Dresden's Mobility Strategy



Innovation and Connection

Land Use and Transport Planning both have optimum accessibility as their objective.

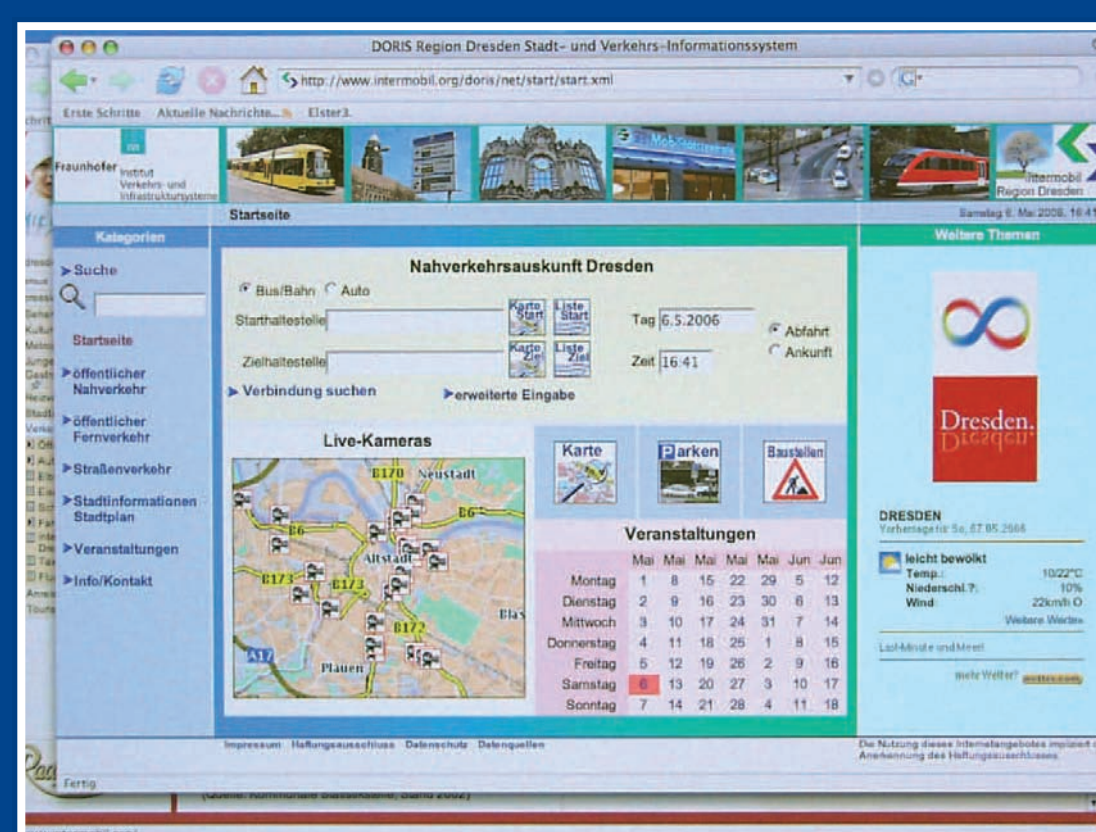
Today, though, transport mobility determines urban and suburban development. Extra traffic is created by this mobility orientated society which clashes with the aims of the mission statement and pushes the limits of the infrastructure network. Transport strategies must take into account this generated traffic and try to influence it 'before the journey takes place'. This demands a broader 'view of traffic' and a new range of measures.

The challenges for the development of the transport systems therefore show a trend which exceeds the conventional framework of previous transport planning and increasingly requires innovative shaping mechanisms.

The most important thing that should be considered is an efficient way of dealing with the existing transport infrastructure. During the development of such new shaping mechanisms for the traffic system, organisation and optimisation of mobility gain in importance.

The state capital, therefore, set its objective as: Not to cope with the traffic, but to shape mobility. The task is to ensure the mobility requirements of the citizens and the mobility demands of the economy in the long-term. This should not only be in the form of expanding the infrastructure, but increasingly innovative approaches in urban and transport development.

The Dresden Mobility Strategy puts forward proposals and approaches.



Mission Statement for Dresden

- Promotion of a sustainable development of Dresden as a European location
- Ensuring that the mobility requirements of the general public as well as the mobility demands of the economy are met
- Reduction of the unwanted consequences of traffic



Dresden received the 'CIVITAS-Award 2005' for sustainable traffic and transport policies which was handed over by Jacques Barrot



Round Table for Bicycle Traffic with the Lord Mayor, 14.03.2006

The Present

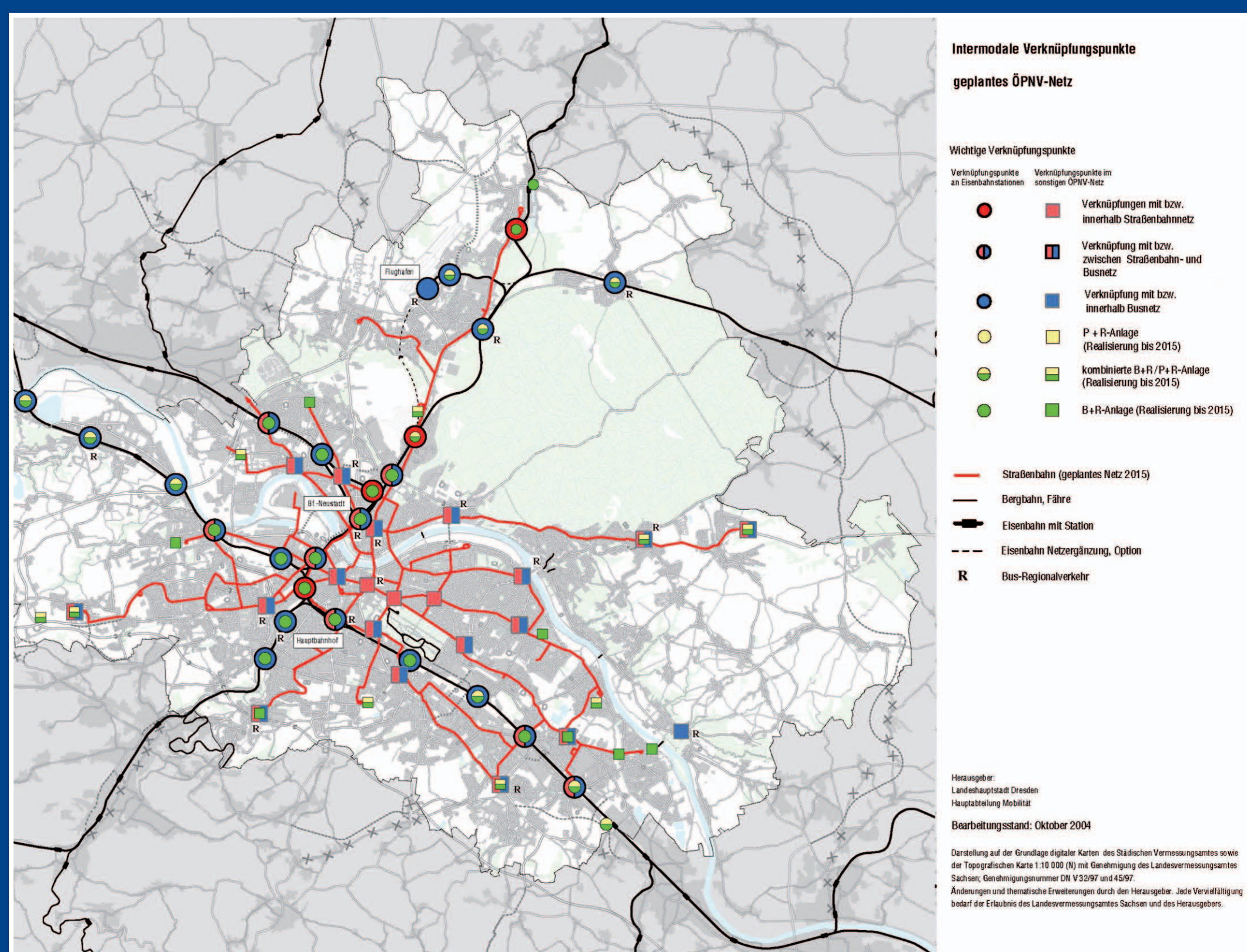
Dresden's Mobility Strategy

Urban
Development
and Transport

Transport
Infrastructure

Transport
Management

Mobility
Management



Planned local public transport network
with international interfaces



Urban Development and Transport

- High quality of life in the city
- Location selection in the connection with transport development
- City centre development in preference to suburban development
- Creation of an urban ambient, city culture and accessibility

Traffic Infrastructure

- Limiting of new road traffic infrastructure construction / reduced infrastructure costs
- Relief for residential areas from the disturbing effects of road traffic
- Optimised accessibility to central venues of trade and commerce
- Networking of transport options by way of inter- and multi-modal interfaces
- Enhanced road safety



Mobility of the Dresden Inhabitants

The Present

Dresden's Mobility Strategy

Transport Management

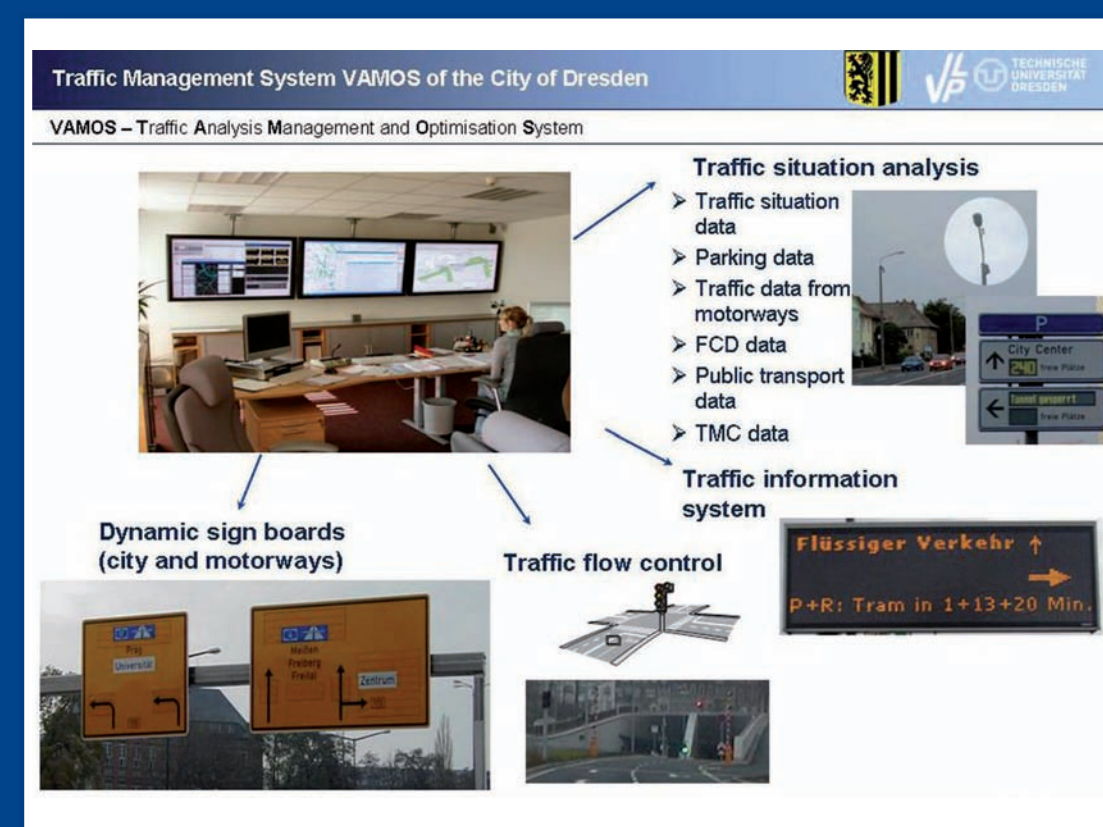
- Supply orientated processing of the traffic
- Exploiting the potential capacity of the existing network
- Prioritisation of public transport and ensuring the flow of private motorised traffic
- Traffic Management
- Intelligent traffic control of flowing and stationary traffic based on up-to-the-minute information of the traffic situation
- Operational transport information (Hindrances due to road works, where there are currently free parking spaces, alternative means of transport ...)
- Comprehensive information systems, CCTV



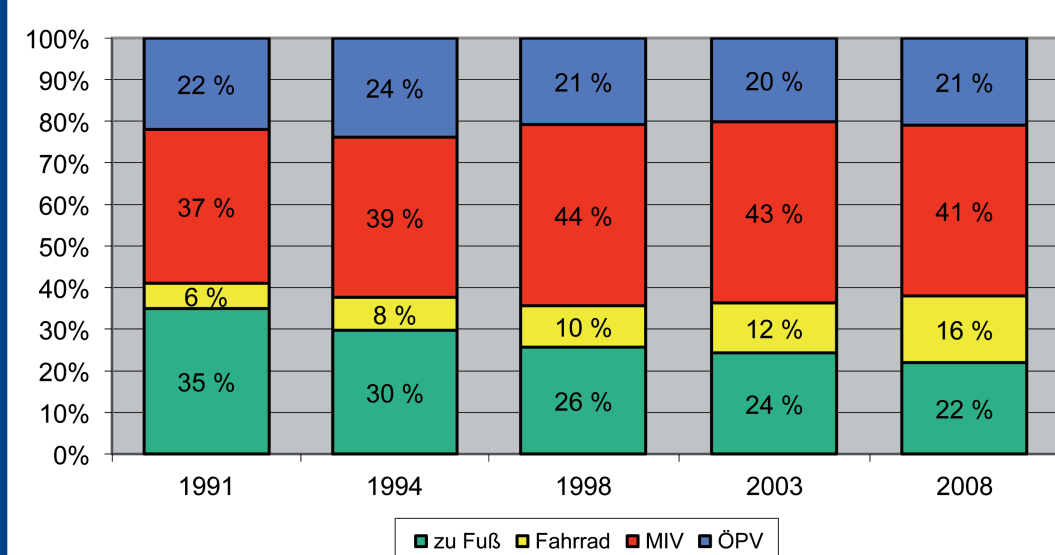
Timetable by text message:
www.fahrplan-aufs-Handy.de

Mobility Behaviour of the Dresden Citizens

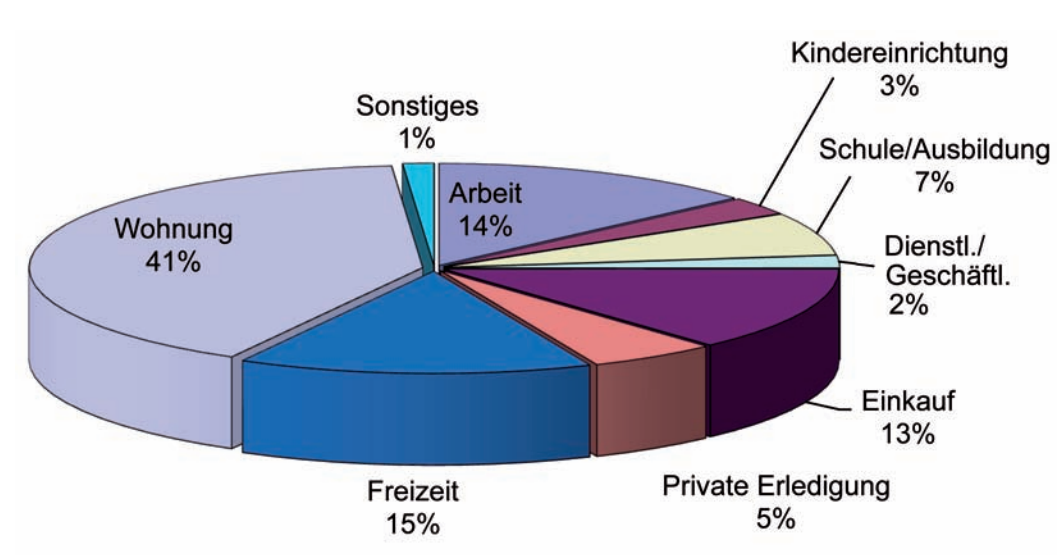
Journeys per person and day	3.1 journeys
Length of journey	22.2 minutes
Distance of journey	6.3 km
Time spent in traffic per day	68 minutes
Car owners	390 cars/1000 inhabitants
Bicycle owners	750 bicycles/1000 inhabitants



Verkehrsmanagementzentrale VAMOS
(Transport Management Centre)



Percentage of type of transport according to journey (modal split)



Reason for Journey

Mobility Management

- Demand orientated influences on the choice of transport before the start of the journey
- Better access to environmentally friendly means of transport with the reduction of the unwanted consequences of private motorised traffic
- Improvement of information and communication systems
- Shape mobility, not cope with traffic



Mobility Advice



Bike Park at Infineon Nord 2006