

## NEW CYCLING STRATEGY FOR BERLIN

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### 1. INTRODUCTION

The first cycling strategy for Berlin was adopted by the Senate in November 2004. It is an integral part of the city's overall transport development plan for sustainable mobility that is both socially fair and city-friendly. Over the last few years the implementation of this strategy has contributed substantially to an increase in cycling activity. Today 1.5 million journeys are completed daily in Berlin by bicycle – and this figure is still rising.

In March 2011 the Berlin Senate adopted a new version of its city transport development plan. The plan contains an updated traffic forecast and impact assessment as well as a modified and extended list of measures and has now to be taken into account in the city's strategy for cycling. In addition, new challenges as well as changes in the general parameters for cycling have emerged as a result of social developments and – not least – the success of the cycling strategy itself.

- Because of the increase in cycling activity planning has to deal increasingly with problems caused by the quantity of bicycles. Today there are already bottlenecks at major junctions and capacity problems when it comes to transporting bicycles on public transport or storing them in bicycle stands.
- Because of two large-scale surveys carried out in 2008 we now have comprehensive information about the mobility habits of the citizens of Berlin. This information provides us with a good basis for targeted public relations work and for appealing to new groups of users.
- Demographic change, above all the marked increase in the number of elderly people, creates particular demands which it is necessary to meet.
- Much remains to be done in the area of road safety – with regard to both the design of a safe transport infrastructure and the conduct of road users.
- The Berlin region has successfully applied to central government to be an "international showcase for electromobility". The market for e-bikes is already booming. But there are other product developments as well that make cycling easier, for example freight bicycles or trailers for transporting children or luggage. The challenges they pose for the transport infrastructure and their impact on traffic safety still have to be examined.
- The image of cycling is improving. It is increasingly seen by large sections of society as a modern, healthy and not least efficient and economical alternative to the car. It is important that we take advantage of this opportunity.
- The increase in cycling activity is also leading to a greater number of conflicts with other road users. For this reason, communication strategies for deescalating such conflicts and for creating a climate amongst road users that is characterised by mutual consideration are gaining in importance.

So, after eight years of implementing the city's cycling strategy, it was time to take stock. What has been achieved, where are there shortcomings and what new developments have to be taken into account? It is with reference to these questions that the cycling strategy for Berlin has been fundamentally updated. This was understood not just as a project for transport administrators but once again as a joint development plan for a range of stakeholders.

The cycling strategy brings together measures from various areas of activity and responsibility. For this reason, the Senate Department for Urban Development (*its title at that time*) set up a widely representative cycling committee in 2003 which advises the senate department on the development and implementation of its cycling strategy. The members of this committee include administrative staff from senate and local borough departments, who are responsible for a variety of aspects of cycling, representatives from the police, environmental and transport groups and public transport as well as experts from academia and the bicycle sector and the Senate's cycling commissioner<sup>1</sup>. This broad range of participants meant that a variety of experiences and points of view were contributed to the process of updating the strategy. Moreover, important city administrators and external parties were involved in the process and contributed to the implementation of the strategy in their respective areas of responsibility.

In five day-long meetings the cycling committee discussed a wide range of topics with the help of specialist contributions from committee members and from invited experts, and formulated specific recommendations for action. These recommendations essentially constitute the basis for Berlin's new cycling strategy.

## **2. SEVEN ARGUMENTS FOR MORE CYCLING IN BERLIN**

### Cycling

- creates mobility. Citizens of (almost) any age can travel short and medium-length distances by bike quickly and inexpensively. In combination with public transport the bicycle can also compete with the car on longer journeys.
- improves the quality of life in a city. It is quiet; it doesn't create air pollution and other gases which harm the climate; and it doesn't take up much space.
- can replace part of motorised transport. Almost half of the journeys undertaken in Berlin are less than 5 km. long, but a third of these journeys are undertaken by car. Many of these motorised journeys could also be undertaken by bicycle.
- is fun and healthy. It has been shown that just half an hour's cycling a day is good for one's health.
- contributes to traffic safety. The more that bicycles are visible on the roads, the more all road users adjust to this.

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<sup>1</sup> At the end of the previous term of office of the government of the Federal State of Berlin the contract with the cycling commissioner came to an end.

- is easy on the public purse. Cycling infrastructure is comparatively inexpensive and investments in this infrastructure are quickly repaid by intensive use.
- Supports the economic development of Berlin. A city with a good quality of life and with an attractive public road design is attractive for established and new inhabitants, for tourists and for business people.

For these reasons, support for cycling is a strategic part of the urban development plan for transport in Berlin.

### **3. GOALS AND GUIDING PRINCIPLES IN CYCLE PLANNING**

#### **3.1 Strategic goals**

The cycling strategy is just one part of the overall goal of serving the mobility needs in the city in a way that is healthy, safe and economically efficient and at the same time city-friendly, environmentally sustainable and socially fair. By supporting non-motorised transport it is intended that the city should maintain and in the long-term improve the quality of its living environment. In order to make it possible for people to understand the progress being made in implementation and to spot any shortcomings, the cycling strategy has set itself the following strategic goals, the achievement of which should be regularly monitored.

##### 3.1.1 Increase in cycling's share of the overall number of journeys undertaken in the city

Cycling's share of the overall number of local journeys undertaken by the inhabitants of Berlin in 2008 was 13%. Every day approximately 1.5 million journeys are undertaken using the bicycle as the main means of transport. Given the current structure of the journeys a further 0.6 to 0.9 million of the journeys undertaken by car at the time the survey was conducted could be transferred to the bicycle. The cycling strategy sets itself the goal of activating this potential by 2025. This would mean that cycling's share of journeys undertaken would rise to 18-20% (in addition to journeys combining bicycle and public transport). To achieve this goal, cycling's share of journeys undertaken would have to increase by 3-4% annually. The traffic counts of recent years show that such growth rates are realistic.

##### 3.1.2 Transferring longer journeys to the bicycle

The average length of a journey by bicycle in Berlin is 3.7 km, and only 19% of bicycle journeys are longer than 5 km. However, the transfer of longer journeys from the car to the bicycle – something which is supported by new technological developments – can make an extensive contribution to the reduction of negative effects of motorised traffic on the city. For this reason, the cycling strategy is committed to the goal of making cycling more attractive on longer journeys. It therefore aims to increase the average journey length by bicycle by 25% to approximately 4.6 km by 2025. If the modal share of the bicycle is thus increased, more than twice the reduction of negative traffic effects can be achieved.

### 3.1.3 Combining the bicycle with public transport

There are certain limits to bicycle use in a city the size of Berlin because of the length of some of the distances involved. Thus, the combination of the bicycle with public transport is all the more important. Combining cycling and public transport increases the radius of the bicycle, enlarges the catchment area of public transport, which in turn may increase passenger numbers, and decreases travel times on many routes. At the moment, around 3% of bus and rail passengers use a bicycle to travel to or from the relevant public transport stop. The experiences of other cities show that this figure can be increased. The cycling strategy has set itself the goal of creating the conditions for increasing the figure for combined journeys to 5%.

### 3.1.4 Reducing accident figures

In the three-year period between 2008 and 2010 20,910 accidents involving cyclists were registered. 26 cyclists were killed and 14,390 were injured - 1,548 of whom seriously. Even if these accident statistics – given an increase in bicycle traffic – have fallen slightly more recently, these figures are unacceptable, especially since the year 2011 saw an increase in accident figures again. Taking as its point of departure a vision of urban transport that doesn't cost a single life, the cycling strategy has taken on the goal of the city's overall transport development plan to reduce by 2025 the number of cyclists killed in road traffic accidents by 40% and the number of those injured by 30%.

### 3.1.5 Appropriate financing

Measures for supporting cycling in Berlin are comparatively inexpensive and cost-effective, especially since existing road capacity can frequently be used differently. Nevertheless, the implementation of the cycling strategy demands a range of measures, the financing of which needs to be secured. For this reason, the strategy continues to assume that cycling requires a share of the money available for the financing of transport in the city which is appropriate to cycling's importance for sustainable mobility. The federal government's National Cycling Plan envisages a minimum investment in cycling of €5 per inhabitant per year. The city of Berlin is aiming to reach this figure incrementally by 2017 for measures to support cycling within the context of overall investment for road building.

### 3.1.6 Prompt completion of the cycle route network

The completion of the main cycle route network, including signposting, is of real and symbolic importance for establishing Berlin as a bicycle-friendly metropolis and for promoting cycling in the city. For this reason, the cycling strategy is aiming to achieve an overall network by 2017 that is signposted and that can be used comfortably by cyclists. As an addition to the main network, it is intended to identify a subsidiary network in each borough of the city by 2013 and to actually create these subsidiary networks promptly.

### **3.2 Guiding principles of the cycling strategy**

1. Cycling is part of a transport system that links all means of transport and guarantees mobility in the city. For many journeys different transport options exist. The cycling strategy aims at influencing people's choice between those options in favour of the bicycle. In doing so, it focusses on switching journeys which are currently undertaken by car to the bicycle and to the combined use of the bicycle and public transport respectively.
2. The cycling strategy is intended to contribute to the implementation of the goals formulated in the city's overall transport development plan and in the urban development plans "Centres" and "Climate". Additionally, it is intended – in conjunction with the city's pedestrian strategy and support for public transport – to strengthen "eco-mobility" as a whole. It extends, adds to and specifies the measures listed in the urban development plans for achieving this goal.
3. The cycling strategy specifies and extends at the local level the Germany-wide goals set out in the National Cycling Plan and integrates some of the ideas and schemes of central government, for example, concerning the long-distance cycle route network and the construction of cycle paths along trunk roads and federal waterways.
4. There are shared goals and interests with Brandenburg, Berlin's neighbouring federal state, and with some of its towns that are close to Berlin, for example Potsdam, Kleinmachnow, Falkensee, Hönow and Altlandsberg. These shared interests include creating routes between neighbouring locations and creating a regional cycle path network including fast links and also the transport of bicycles on local transport.
5. A bicycle-friendly city is a city of short journeys – from where people live to local amenities and the social infrastructure, to places of work and recreational areas, and to public transport links. Berlin's high density housing and its poly-central structure are compatible with short journeys and inter-connected journeys that can be undertaken by bicycle. Many journeys can be transferred to the bicycle in trade and commerce as well, particularly the final stage of a delivery process.
6. The cycling strategy views and promotes cycling as a complex system. Such a system involves good roads and paths for cyclists, sufficient bicycle parking options, excellent public transport links, safe traffic conditions, a variety of available services, and publicity work that addresses the relevant target groups.
7. A study of cycling support programmes in other cities and countries shows that long-term continuity in pursuing cycling policy goals is decisive for success. It also shows that a combination of future-oriented infrastructure measures and "soft" measures involving public relations and image building are required in order to generate the expected results. Last but not least, the best-practise-cases from other countries show that with regard to cycling measures too sufficient resources need to be allocated in order to accommodate large numbers of cyclists.

8. Berlin offers good basic conditions for cycling. In addition to the fact that the city is flat and has comparably dry climate, there is a dense network of minor roads and green links offering a variety of options for avoiding city traffic. Furthermore, many of the city's roads are very wide, often with capacity in reserve for cycle paths. There are also good pre-conditions for the combination of cycling and public transport, and the city itself is compact and varied. It is important to use, to maintain and also to extend these qualities for the benefit of cycling.
9. There is demand everywhere in the city for direct, comfortable and safe links for cyclists. So it is necessary to create good cycling conditions all over the city: on main roads, on minor road networks, in the inner city, in local centres, in places where people live and work and in the recreational areas of the city. Local centres in the city and their main shopping streets, together with other important destinations in the city and its surrounding areas, should be accessible by bicycle on attractive routes.
10. To improve the conditions for cycling sustainably and comprehensively, its needs have to be considered with regard to all measures affecting public roads in a way that corresponds to its intended future importance. This applies to the allocation of space and of finance for cycling facilities and parking, to the setting of priorities for traffic lights at building sites and in the case of diversions, to improving road traffic safety and to road cleaning and snow clearing.
11. Public relations that target potential cyclists and are able to influence their transport choices are necessary in order to overcome their reservations about using a bicycle in everyday traffic situations and to reduce any resistance they may have to the idea. Any improvements in the basic physical conditions for cycling have to be communicated via precisely targeted public relations work with a view to creating a good climate for cycling and consideration and cooperation between all road users, to strengthening the individual's feeling of safety and to increasing people's willingness to use their bicycles.
12. Decisions about buying and using a bicycle are also emotionally determined. For a few years now it has been possible to identify a change in image. The car has lost some of its positive image and the bicycle has improved its image. Lifestyles with an affinity to the bicycle are a growing trend. Therefore, in public relations work on cycling it is important to appeal to people's emotions and to make targeted use of image factors. Last but not least, public relations work must reach decision-makers in politics and society as well as individuals and groups that serve as role models.
13. The modal share of the car in the peripheral parts of the city is almost twice as high and the share of the bicycle only half as high as in the inner city. These differences cannot simply be explained by factors such as length of journey and access to a car. For this reason, the potential in the city's periphery should be investigated more closely and specifically focused on both in infrastructure planning and public relations work.
14. Over a quarter of the journeys undertaken in the city by car are related to leisure, and many of these journeys are over relatively short distances. The second most frequent of the journeys that have potential to be transferred to the

bicycle are for the purposes of shopping and for access to other local amenities. These typical destinations need to be taken into consideration when it comes to infrastructure planning and public relations work.

15. An increasing number of journeys are undertaken by visitors to the city. Tourism is an important economic factor for Berlin, so extending facilities and services for tourists is a key component of the cycling strategy. It is necessary on this point to take the opportunity to bundle different measures which are also of value to everyday traffic. At the same time efforts have to be made to ensure that the traffic behaviour of tourists using bicycles does not have a negative impact on traffic flow and traffic safety.
16. Since the spring of 2012 the Federal State of Berlin, together with the Federal State of Brandenburg, has been an "international showcase for electro-mobility" and is involved in promoting electro-mobility as a constituent part of a sustainable mobility strategy. Within this context, for example, a project with the name "pedelec corridor" is planned. The e-bike is playing an increasingly important role in everyday mobility. It is important to take this fact into consideration and to make use of it.
17. The general conditions for cycling are shaped both within and outside of the city's administration by a variety of stakeholders. The most important of these participated in the cycling committee and helped to design the city's cycling strategy. It is of key importance for the implementation of the strategy that the measures that have been decided on are quickly agreed and translated into policy by the central administration in the city and by the boroughs. In addition, it is necessary to draw together supplementary activities of other public stakeholders and external organisations, in particular the operators of public transport services, groups concerned with transport policy and the bicycle industry. These stakeholders too have to be involved in the implementation of the cycling concept and in its evaluation.

## **4. FIELDS OF ACTIVITY AND MEASURES**

### **4.1 Securing and extending existing qualities**

#### **4.1.1 Maintaining the cycling infrastructure and bringing it up to standard**

The cycling network in Berlin has been continuously extended over the recent years and has now reached a length of 1,000 km. However, it includes many older cycle paths which have become damaged or which do not meet today's standards with regard to width, safety distance (from the road, the pavement or parked cars), the quality of the cycle path's surface and its visibility to car traffic.

- a) The bodies responsible for road construction and maintenance will maintain existing cycle paths in a good condition. This also applies to non-compulsory cycle paths, which represent a very welcome offer for many users. Central administration and the boroughs will, within the limits of their financial possibilities, have to make available the necessary resources for this work. The programme of refurbishing cycle paths will be intensified.

- b) The bodies responsible for road construction and maintenance will check when carrying out maintenance work whether a standard improvement is achievable in compliance with the "Recommendations for cycle paths and lanes" (ERA). This can also be achieved by replacing a constructed cycle path by a protective line or cycle lane line along the road. Where an acceptable minimum standard cannot be achieved, or safety cannot be ensured or a cycle path has become redundant, then – in consideration of the preferences of less experienced cyclists – the space at the side of the pavement can be made available once more exclusively to pedestrians.
- c) The ADFC (*the General German Cyclists' Club*) will involve its members in gathering information about problematic sections in the existing cycle path network and will pass this information on to the cycling committee and the responsible departments of the Senate and the boroughs as a basis for programmes for the removal of these defects.

#### 4.1.2 Keeping cycle paths and lanes clear of obstructions

It happens again and again that constructed cycle paths, cycle lanes and protective line markings in the road are blocked by motorised vehicles which have stopped for people to get in or out, to load or unload, for shopping or for other purposes. Obstructions also occur due to the fact that cycle paths gradually become overgrown or that snow is not cleared from them or is even piled up there. In these situations cyclists are forced to steer into the flow of motorised traffic or – in the case of constructed cycle paths – onto the sidewalk. This can lead to delays, obstruction and dangers for cyclists and other road users. The quality advantage of the cycle path is then lost and the disinclination of less confident cyclists to use the cycle lane in the road increases.

- a) Cycle paths and lanes must be kept free of obstacles of all kinds. Appropriate priority has to be given to this in the context of snow clearing, street cleaning and gardening work.
- b) Where the usability of cycle paths and lanes is regularly limited by parked cars, the Senate Department for Urban Development and the Environment and the boroughs, within the boundaries of their respective responsibilities, will check to see if such parking can be made more difficult by a parking space management system or by construction measures and if it can be made legally possible – especially for commercial traffic – to stop briefly and to load or unload. Where necessary, this could mean that permanent parking spaces have to be given up or restricted to certain times of the day.
- c) The ADFC will be asked to involve its members in identifying particularly problematic areas and passing this information on to the borough.
- d) The employees of the borough public order offices will be required, as part of their responsibilities, to include in their checks the stopping and parking of vehicles on cycle paths and lanes in accordance with the requirements of the newly issued Road Traffic Regulations and to penalise any transgressions. Where considerable danger is caused to traffic, the relocation of vehicles might become



necessary. The police will support the surveillance work of the borough public order offices independently within the context of their patrols.

- e) Within the context of public relations work on the co-existence of motorised and bicycle traffic (see 4.3.2 below), it is intended to address the problem of parking on cycle paths and lanes, and to raise awareness of this problem amongst car and lorry drivers.

#### 4.1.3 Taking cyclists into consideration where there are building sites

Cyclists should be guided past building sites safely and without having to dismount, and should not be confronted with greater restrictions than other road users. One-way systems caused by building sites can often be avoided given that cyclists find such diversions difficult. However, at building sites there are frequently unnecessary and even dangerous restrictions for cyclists. The cause is often a failure of construction firms to observe the traffic law requirements of the transport authorities. The capacity to carry out checks and to penalise non-compliance, however, is too low because of the staffing situation in the relevant authorities.

- a) The ADFC will involve its members in monitoring building sites and passing on information to the responsible authorities as well as in following up complaints.
- b) The applicants (developers and construction companies) to the transport authorities and bodies responsible for road construction and maintenance will be required to develop individual solutions for guiding traffic around building sites that are cyclist-friendly and pedestrian-friendly. These solutions will be on the basis of existing guidelines, and the applicants will have to develop monitoring tools to ensure that traffic law requirements are being implemented. It is intended to offer a platform for relevant messages from local people.
- c) The road construction firms and their managing companies will be given, along with the relevant requirements of the transport authorities, a notice about safe traffic management at building sites.

#### 4.1.4 Re-check the obligation to use cycle paths

Various investigations and accident analyses by the police have shown that constructed cycle paths along the side of a road frequently represent a safety risk, particularly if there isn't good visibility at junctions and driveways leading to adjoining properties. Moreover, it is often barely possible to cycle reasonably quickly on such cycle paths. For this reason, parliament and case law have restricted the obligation to use cycle paths to exceptional cases. The obligation to use the cycle path has in many cases already been cancelled, and further cycle path sections are being reviewed.

The obligation to use cycle paths is to be restricted to exceptional cases in which a high level of road safety cannot be ensured in another way or in which, in the event of a cancellation of this obligation, serious disadvantages for public transport would be unavoidable. Within these guidelines, work on examining remaining compulsory cycle paths is to be completed by 2013. Following this, the cancellation of the obligation to use the cycle path is to be

implemented promptly. Cycle paths which continue to be obligatory are to be brought up to the standard required by the ERA.

## **4.2 Better roads and paths for cyclists**

### **4.2.1 Looking ahead for growth**

On working days around 1.5 million journeys are undertaken by bicycle daily. In the last 10 years this figure has risen every year by around 50,000, and further growth is a declared goal of the cycling strategy. However, on many inner city routes there are already indications of capacity problems. For this reason, it is necessary to develop concepts for dealing with large numbers of cyclists. Large major cycle lanes, which are fit for purpose and allow cyclists to travel quickly, can contribute to solving this problem, as can roads for bicycles only and cycle lanes which allow cyclists to travel alongside each other at different speeds, and sufficiently large spaces for cyclists at junctions. Given the increase in the number of faster bicycles and the fact that cyclists are increasingly travelling in more than one lane, options for widening cycle lanes have to be examined. Measures that just about comply with today's minimum standards might not meet the requirements of the future.

Regarding all planned road construction measures the Senate and the boroughs will pay attention to the fact that the capacity of the cycling infrastructure keeps pace with the growth that is envisaged. This applies to the extension of the network and to the standards at junctions. The transport policy groups will continue to monitor this process critically.

### **4.2.2 Making cycling attractive over longer distances**

The average journey length by bicycle is 3.7 km in Berlin. Only 19% of bicycle journeys are longer than 5 km. If the city succeeded in transferring longer journeys to the bicycle as well, it would be relieved to an exceeding amount of the impact of motorised traffic. Since the amount of time an individual has for mobility tends not to change, the willingness of people to use their bicycle and not the car for slightly longer journeys will increase if cycling is made faster. This means that important potential for cycling can be realised by measures which shorten journey times, make cycling attractive over longer distances and thereby encourage people to avoid using their car. With these goals in mind "fast cycle lanes" have already been successfully tried out in other cities. The following measures are a possibility here: cycle roads (in some cases with an automatic right of way), a "green wave" for cycling on selected commuter routes and in the network of minor roads the replacement of traffic light systems with the standard right of way (right before left).

- a) Measures for speeding up cycling like road/path surfaces which enable fast cycling, wider cycle lanes which make overtaking possible, keeping waiting times at junctions to a minimum, developing the cycle path network to make indirect routes unnecessary and improving signposting all have to be taken into consideration where planning is going to have an impact on cycling. Moreover, because of the increase in e-bikes cycle paths should in future generally be planned for speeds of up to 25 km per hour.

- b) The bridges for cycling and pedestrian use mentioned in the list of measures in the city's transport development plan are a constituent part of the cycling strategy and the route concept.
- c) Within the context of the cycling strategy model plans for fast cycle routes and for traffic lights that are geared to the needs of cyclists should be developed and implemented (see 4.2.3 and 4.2.6 below).

#### 4.2.3 Completing the overall cycle route network

The overall cycle route network, which in its final development phase comprises a length of 830 km, consists of twelve radial and eight tangential routes (main network approximately 250 km.) which are complemented by seven long-distance cycle routes (approximately 180 km.) and additional routes between boroughs (approximately 400 km.). Added to the network is then the Berlin Wall Trail (approximately 160 km.). About three-quarters of the planned main cycle network are very suitable for cycling. Eight main routes and four tourist routes are already signposted. The stage that implementation has reached varies from borough to borough. Some route sections are so successful that it is necessary to give thought to expanding their capacity.

- a) The Senate Department for Urban Development and the Environment, in cooperation with the boroughs of the city, will complete the main cycle network to a suitable standard for cycling by 2017 and will signpost it. Given the anticipated growth in cycling, this will involve checking and further developing the required standards on the basis of the new version of the ERA. Part-sections which have not yet been developed to the requisite standard are to be gradually brought up to this standard.
- b) There will be information about the routes as they are completed – provided through media briefings, leaflets and on the Internet.
- c) Within the context of model projects the options for speeding up and expanding the capacity of two main routes to a standard which is also attractive for longer, everyday journeys ("fast cycle routes") are to be examined, mainly on sections in outlying districts of the city which do not have good rail alternatives.
- d) The "pedelec corridor Berlin-Brandenburg" between Berlin-Steglitz and the neighbouring area of Brandenburg is to be established by 2015 as the first major route for e-bike users within the context of the "international showcase for e-mobility".

#### 4.2.4 Developing cycle route networks in the boroughs

The bundling of cycling on the major cycle route network comes up against its limits given the reluctance of cyclists to take a less direct route. For this reason, it is necessary to continue to fill out any large gaps in the major cycle route network. With this goal in mind subsidiary routes are being developed and realised in several boroughs. However, the approach to this task varies from one borough to the next

and consultation with neighbouring boroughs and surrounding communities is not always adequate.

- a) The boroughs are requested to involve the relevant associations with a view to completing the planning of subsidiary routes designed to increase the density of the major cycle route network, developing implementation strategies and publishing the completed routes (for example, on the Internet). The points at which these subsidiary routes connect with the major cycle route network and the standard as well as the density of these routes have to be agreed in consultation with the Senate Department for Urban Development and the Environment. Links with important stations and bus and tram stops also have to be taken into account. Route networks that were designed in other contexts should be integrated insofar as they meet the quality requirements for the cycle network and insofar as the interests of pedestrians are sufficiently taken into consideration.
- b) The Senate Department for Urban Development and the Environment will support this route planning work at borough level with advice, include any agreed subsidiary routes in its publications and support implementation within the framework of the overall budget that has been made available for cycling. The boroughs will give the necessary priority to the construction, road-marking and signposting work that is required for the agreed routes to be realised.
- c) Within the context of model projects the Senate Department for Urban Development and the Environment will give priority funding to the design and realisation of three local borough cycle route sections that have particular local importance and are good examples of how to deal with typical implementation problems. The boroughs can compete with one another with suitable projects for such funding.

#### 4.2.5 Making the entire city bicycle-friendly

It is also necessary to make conditions for cycling safe and attractive beyond the route networks. Many journeys are concentrated on main roads because they provide direct links, are important in terms of the city's topography and help people to find their way. However, because these main roads don't often have a cycling infrastructure that is up to standard, a considerable amount of work needs to be done here. This work will have to be done step by step and on an ongoing basis.

Most journeys undertaken by bicycle are local in nature and start or finish at the place where the cyclist lives. For this reason, there is demand for short, comfortable and safe links comprehensively across the entire area of the city. This highly specific distribution of cycling can be further improved using a variety of small-scale measures, for example, by opening up cul-de-sacs and one-way streets, creating even surfaces and installing features that make crossing roads easier.

- a) Concerning all measures carried out on main roads the Senate Department for Urban Development and the Environment and the boroughs will have regard to the creation of safe and appropriate cycling structures whilst considering the requirements of other road users. Furthermore, they will regularly examine the scope for redistributing road space, which arises from reserve capacity, a fall in

motorised traffic, a re-evaluation of the various claims on road space or from traffic reduction measures, and use any scope that is identified in order to meet the targets of the city's road development plan. Where cycling structures that are up to standard cannot be created, the aim will be to achieve a speed limit in mixed traffic conditions that is compatible with the safety needs of cyclists.

- b) The programme for creating and/or refurbishing cycling structures on roads that are the responsibility of central government will be continued, using the available central government funding.
- c) The Senate Department for Urban Development and the Environment and the boroughs will carry out systematic checks by 2013 to see which further one-way roads can be opened for bicycles to travel in the opposite direction.
- d) The Senate Department for Urban Development and the Environment will advertise and financially support three model projects for redesigning in a bicycle-friendly way a local area (e.g. a local centre, the area surrounding a railway station or a residential estate or neighbourhood). These projects should include road construction or road-marking measures, opportunities to park bicycles and links with public transport.

#### 4.2.6 Bringing junctions up to standard

The design of junctions is of very great importance for cycling to be safe, attractive and efficient. This is particularly true of the "major" junctions in the network of main roads and of cyclists crossing main roads using main and subsidiary cycle routes. At junctions managed by traffic light systems the needs of cycling will have to be weighted in accordance with its importance. Depending on the individual case, intelligent traffic flow concepts can improve conditions for cycling. Such concepts include widening the space available to waiting cyclists, special channels for cyclists, wide crossing points, the opportunity to turn left directly (possibly as a "dual system" and as an alternative to turning left indirectly) and – insofar as this is acceptable from the point of view of safety – other special case-by-case solutions. The same also applies to traffic at roundabouts.

- a) The Senate Department for Urban Development and the Environment and the boroughs will integrate into all road network planning and road construction measures on the basis of ERA (Recommendations for Cycle Paths) and RILSA (Guidelines for traffic lights) suggestions as to how bicycle traffic is to be guided safely and quickly across junctions. In all of this, bicycle traffic should as a rule be guided directly along with motorised traffic and be given signals at the same time. Stopping areas for bicycles at junctions and crossing points should be sufficiently large given the anticipated growth in bicycle numbers. All cyclists should be able to get through the junction in the course of one traffic light change.
- b) The road traffic authorities will start and evaluate three model projects for solutions that have worked well in other towns and cities (e.g. special channels for cyclists where a large number of road users turn left) but which are not yet common in Berlin. Where these projects are successful, the authorities will develop standard plans for these solutions.

- c) In one model project the bicycle-friendly coordination of traffic lights that follow one another in sequence is to be tried out in an area with a large number of cyclists.

### **4.3 Safety on the roads**

#### **4.3.1 Designing cycle paths and lanes safely**

Cycling helps to extend natural life because of its positive effects on health. At the same time, however, cyclists (and pedestrians) are exposed to a greater risk of injury in the event of accidents than other road users. Even though there was an increase in bicycle traffic during the past few years, the frequency and seriousness of accidents fell slightly. However, in 2011 an increase was recorded again. Against this background, the goals of the traffic safety programme are far from having been achieved. The risk of suffering serious injury is particularly high in the case of children, young people and the elderly.

Many accidents are attributable to poor visibility between road users. The main cause of accidents for cyclists is using the wrong lane (e.g. the pavement, not infrequently because the correct lane is at least perceived to be defective). In the case of car drivers the most frequent cause is mistakes when turning off the road. Almost a third of fatal accidents are caused by lorries turning off the road. Many accidents can be avoided with the help of simple measures, for example the creation of better visibility, of a consistently sound road surface, clear road-marking and the clear marking of cycle lanes at drives leading to adjoining property and at entrances, and not least by creating safe options for crossing the road.

Measures which road users feel to be a burden and for which they can't understand the need are often not accepted, with the result that in these cases such measures add to the safety risk.

- a) The bodies responsible for road construction must ensure that cycle paths and lanes are designed to be safe in accordance with existing technology and accident research and that larger scale construction projects on public roads undergo a safety audit.
- b) In locations where accidents involving cyclists happen frequently, the cause of these accidents must be evaluated and suitable measures examined and implemented for the purpose of preventing such accidents in future. Depending on the section of the road affected, responsibility can lie with the accident commission in Berlin or with the boroughs. Any measures should take into consideration the safe management of growing numbers of cyclists. Because this will often only be achievable in mixed traffic conditions, a speed limit which is compatible with the safety needs of cycling should be set in such cases.
- c) Where two-lane turning off with limited compatibility of different road users still exists in individual cases and is managed by traffic light systems, this should be stopped using appropriate measures.

- d) To guarantee that accident prevention measures are correctly targeted, the Senate Department for Urban Development and the police will continue to evaluate accidents involving cyclists that are recorded in the accident database.

#### 4.3.2 Establishing road safety as an important issue in people's minds

Influencing people's behaviour is always an important part of accident prevention. Many accidents could be avoided if greater consideration were exercised between car drivers, cyclists and pedestrians. For this reason, it is important to communicate again and again to all road users the need for observing the rules of the road and normal standards of behaviour. Furthermore, inconsiderate behaviour by individual road users is a significant hurdle to achieving an even broader acceptance of cycling in the city.

- a) All members of the cycling committee are asked, within the limits of what is possible, to contribute to a traffic climate that is characterised by mutual consideration and the observance of the rules of the road.
- b) The Senate Department for Urban Development and the Environment, in collaboration with other persons involved in road traffic safety, is running a campaign in 2012 and 2013 which appeals for conduct in accordance with rules and regulations and for mutual consideration between car drivers and cyclists as well as between cyclists and pedestrians.
- c) The Senate Department for Urban Development and the Environment will take the coming into effect of the newly issued Road Traffic Regulations as an opportunity to run an information campaign which aims to inform car drivers and cyclists about their rights and obligations. In doing this, it will be involving other representatives from the field of road traffic safety and also partners in the media.
- d) The "Blind Spot campaign" of the campaign group "Road Traffic Safety for Schoolchildren", which the police also belongs to and which has been running for a number of years, will be continued and managed by the Senate Department for Education, Youth and Science with a focus on raising awareness amongst car and lorry drivers of the existence of cyclists and pedestrians who are using the road in parallel. The transport policy groups will continue their public relations work on this issue.

### **4.4 Sufficient parking spaces**

#### 4.4.1 Overall concept for bicycle parking

If people have easily accessible and safe options for parking their bicycle at their place of residence and at important destinations, they are more willing to use it for everyday journeys. However, almost a third of bicycle owners rate the parking facilities at their place of residence as difficult to use or unsafe. There are problems, particularly in large estates of new housing and in densely populated neighbourhoods with lots of older apartment houses. Moreover, there is often a lack of adequate and

effective bicycle parking facilities at important destinations for cyclists, for example in front of shops and public buildings, at work and at schools, and at railway stations and bus and tram stops. The bottlenecks and demand for bicycle parking spaces at popular destinations will increase if cycling continues to grow in popularity, with more bicycles being of the high-quality variety.

The cycling strategy assumes that considerable potential for everyday bicycle use can be realised by improving bicycle parking facilities. The pre-conditions are that the parking facilities are easily accessible and close to where people live or to their destinations, that they make it possible to park a bicycle in a stable environment without it getting damaged, that it is possible to lock the bicycle safely and that the facilities provide protection from the elements when bicycles are parked there for a longer period of time. Finally, such parking facilities should not cause an obstruction to pedestrians.

- a) The Senate Department for Urban Development and the Environment will, with the participation of the boroughs and transport policy groups and in consideration of existing planning approaches (e.g. "Guidelines for Bicycle Parking"), compile in an "Overall Concept for Bicycle Parking" empirical basic principles for bicycle parking. It will also develop strategies and ideas for increasing the number and variety of bicycle parking facilities and suggest a financial approach to this issue as well as model projects.
- b) The boroughs are requested to systematically identify shortages of bicycle parking facilities in public places and to develop their own strategies for extending available capacity. Depending on the local situation this might mean that changing the use of designated car parking spaces can be considered.
- c) Where large events take place in public spaces (supervised) bicycle parking facilities should also be provided in sufficient quantities. Authorisation for such events would then have to be made dependent on a corresponding contractual obligation.

#### 4.4.2 Making use of existing regulatory frameworks

In the case of new buildings, building alterations or changes of building use, the Berlin Building Code and the implementation standards prescribe that there must be sufficient bicycle parking places in terms of both quality and quantity. Despite this, the necessary bicycle parking facilities are often provided in poorly accessible locations. Particularly in the case of smaller projects for building extensions or changes of use and in the case of projects that do not require planning permission, the requirements according to the Building Code are often ignored or existing bicycle parking facilities are removed again. There are currently only a few examples of the option of switching to the public street in cases where private space is very limited. A possible cancellation of the obligation to provide bicycle parking is not always in the interests of cyclists, who are dependent on facilities being available at their destination. As far as mobile bicycle stands, which are put up on the public pavement, are concerned, these are often models that are inadequate in terms of their functionality and are primarily conceived as forms of advertising.



- a) The Senate Department for Urban Development and the Environment and the boroughs will, within the scope of their responsibilities in planning permission procedures and by providing applicants for planning permission with information at an early stage, work to ensure that the requirements of the Berlin Building Code regarding the creation of bicycle parking facilities in the case of new buildings, building alterations or changes of building use are properly and consistently implemented.
- b) The boroughs, having consideration for the available space on private plots of land and for other claims to public space, will examine sympathetically the creation of bicycle parking facilities on the public pavement both in the case of new building projects and of existing buildings, and will structure the application process in a way that is simple and transparent.
- c) The legal framework will be modified in such a way that an applicant no longer has the right to cancel his obligation to provide bicycle parking in return for monetary payment. Such cancellations will be limited to exceptions where, because of the particularities of the project, only a small demand for bicycle parking is to be expected at that location in future or where, upon objective analysis, the local circumstances do not permit another solution. Any cancellation payment made must be earmarked and used directly for bicycle parking facilities.
- d) In principle, mobile bicycle stands on public pavements do not require planning permission. However, this will only apply in future if they provide stable accommodation for bicycles and make it possible to lock them securely. This should be made clear in the relevant implementation standards.

#### 4.4.3 Securing the cooperation of the housing and retail sectors

Easily accessible and safe bicycle parking facilities that provide protection from the elements and reduce the disinclination to start a journey are still not the norm in places where people live. Moreover, there are considerable shortcomings when it comes to cyclists' destinations, particularly in shopping streets and at large-scale retail outlets, but also in the case of many companies and public authorities. The consequence is often the disorganised parking of bicycles, which are then an obstacle to pedestrians. For this reason, the bicycle is not perceived by many people as an attractive transport alternative.

Concerning the promotion of cycling, it continues to be an important task to secure the understanding and the interest in this topic of important decision-makers in the housing and retail sectors as well as of employers, and to encourage their willingness to implement relevant measures. Within the context of the "Master Plan for Bicycle Parking" new approaches to this problem are to be developed and – where possible – tried out in the form of model projects.

#### 4.4.4 The challenge of creating parking facilities for large numbers of bicycles

Examples from other towns and cities show how successful cycling strategies create demand for space at important destinations which cannot be met any more with single level accommodation in public places. If a solution is not found in time, hindrances to other road users and pedestrians and a negative impact on the

appearance of the town are inevitable. In particular, examples from the Netherlands show innovative ideas for designing, financing and operating large bicycle parking facilities.

Within the context of its "Master Plan for Bicycle Parking" Berlin will develop new concepts for solving problems of bicycle parking at critical locations where bicycle traffic continues to increase. It will also start up to three model projects which will include questions of how to operate facilities. Experience from other towns and cities should be drawn upon.

## **4.5 Linking cycling to public transport**

### **4.5.1 More bicycle parking facilities at bus and tram stops and stations**

The catchment area of public transport increases if it is combined with bicycle use. Moreover, it is only in combination with public transport that many journeys can be undertaken by bicycle. If the bicycle is used to reach a public transport link and to complete the end of a journey, total journey times, especially from outlying districts of the city, can be shortened significantly. In this way the competitiveness of cycling in comparison to car travel can be improved. Furthermore, network shortcomings in less densely populated residential areas that are less accessible by public transport can be ameliorated through use of the bicycle.

Although a large number of bicycle parking spaces have been created at underground and city train stops over the last few years, the capacities in many locations are already too small for the quantities of bikes there are today. For this reason, a huge increase in capacity is necessary if there continues to be a marked increase in bicycle traffic. The increasing number of expensive bicycles also means that cyclists have greater demands in terms of safety from theft and protection from the elements. One way of meeting these demands would be to have bicycle boxes for rent, as has been tried out in other towns and cities.

- a) The Senate Department for Urban Development and the Environment will continue with its programme for the creation of parking facilities at public transport stops whilst taking into consideration the given level of need. The Berlin S-Bahn GmbH (city train operator) and the BVG (bus and underground and tram operator) are requested to continue to make their contribution to the implementation of this programme. Above all, bicycle parking facilities should be created at bus and tram stops in residential areas where the public transport network is thin. Bicycle parking facilities must be created in such a way as to ensure that safety and operational areas, particularly exit and escape routes, are not restricted or obstructed.
- b) Together with the ADFC (*The German Cyclists' Club*) the Senate Department for Urban Development and the Environment will continue its efforts to achieve an improvement in the bicycle parking situation at regional and long-distance railway stations. In the case of the pending planning work around the Central Railway Station (*Hauptbahnhof*) and the station, Zoologischer Garten, this aim must be given priority. This means that bicycle parking places of sufficient quality should be made available free of charge and in sufficient numbers. In addition, options

for providing an additional number of supervised or lockable bicycle parking spaces (possibly not free of charge) should be examined.

- c) Where there is not enough room, other solutions should be tried out, for example, bicycle storage facilities on several levels or guarded bicycle stations providing additional services. The option of re-designating car parking spaces near the station entrance could also be examined. The Senate Department will initiate and support a model project on this issue. The development of ideas and approaches on the question of bicycle parking at stations and stops will be an important component of the "Master Plan for Bicycle Parking" (see 4.4.1 above). Within the context of this plan at least one bicycle station offering services to cyclists and with at least 500 parking spaces should be achieved by 2020.

#### 4.5.2 Securing the transport of bicycles

Berlin has taken on a pioneering role with its offer of transporting a bicycle on all trains and trams at affordable prices and without time restrictions. This offer makes a substantial contribution to the use of the bicycle for longer journeys too. Since the available transport capacities cannot be increased flexibly, capacity problems are to be expected in the medium-to-long term if bicycle use continues to grow strongly. For this reason, it is intended to relieve such capacity problems by extending the bicycle parking facilities at public transport stops (see 4.5.1 above) and by providing public bicycles for hire (see 4.5.3 below).

- a) The transport companies are requested to retain long-term this exemplary offer of bicycle transport on public transport, to make available storage facilities in the vehicles/carriages that are fit for purpose, to mark the bicycle storage areas clearly and to react flexibly to temporary bottlenecks in bicycle transport (e.g. due to day trips, or rail replacement services).
- b) As the responsible body, the Senate Department for Urban Development and the Environment will ensure, with due regard to the development of demand, that corresponding requirements for bicycle transport are contained in local transport planning and are taken into consideration, within the given financial limits, when transport services are put out to tender and ordered or when new vehicles are procured.

#### 4.5.3 Public bicycles for the "last mile"

Linking the bicycle to public transport can also be improved by providing bicycles for hire at important inner city transport stops for the journey from that point to the actual destination or for journeys within the inner city. Key framework conditions for such provision are reliable availability, a straightforward hiring process and modest additional costs. Such a service was tried out in 2011/2012. It reduces the attraction of driving a car into the city centre and can contribute to relieving any problems with bicycle transport capacities on public transport.

The Senate Department for Urban Development and the Environment will support the idea of extending the pilot project for public bicycles for hire – if the idea proves its worth in the pilot phase – in a, where necessary, modified

form to busy transport stops in the entire inner city area and beyond and of integrating this service into the fare structure of the public transport system.

#### 4.5.4 Moving forward together on "green lanes"

Special bus lanes, which can be used jointly by buses, bicycles and taxis and which in this way become "green lanes", offer cyclists a comparatively safe place to cycle – however, on many stretches of road only at certain times. Buses can drive past traffic jams, but occasionally have to brake and slow down to cycling speed. Given the increase in bicycle traffic, and given the increasing width of vehicles, the requirements regarding the width of the special lanes and regarding the mutual consideration to be exercised by users travelling at different speeds become greater as well.

- a) The Senate Department for Urban Development and the Environment, together with the boroughs, the BVG and cyclists' interest groups, will examine the width of special bus lanes to see if existing time restrictions should be removed.
- b) The transport companies and the cyclists' interest groups are requested to identify sections of road with frequent conflicts between buses and cyclists. How help can be provided - for example, by widening the special lane overall or along certain sections, to enable overtaking or to avoid problems with parked or stationary vehicles - will then be examined on a case-by-case basis. New special lanes must be wide enough to serve the various goals of the city's transport development plan, particularly that of speeding up bus traffic to strengthen eco-mobility.
- c) Within the context of public relations work on co-existence on the roads, the topic of mutual consideration on "green lanes" should be addressed as well.

#### **4.6 More attention to be paid to young road users**

##### Motivating children and young people as well as their parents and teachers

Children and young people are more mobile than the average. For independently undertaken journeys they are dependent on eco-mobility but in Berlin they use a bicycle less often than in other cities and complete more than a third of their journeys as a passenger in a car. Independent mobility has great significance for children's development in respect of health and the ability to concentrate, spatial awareness and the perception of distance, time and speed, learning to take individual responsibility and, finally, the development of social skills. The experience of mobility which they gain at this age has an impact on their later habits as road users. For this reason, children and young people – as well as parents and teachers – are important target groups for efforts to achieve more sustainable forms of mobility.

There have been a number of good approaches up to now in the area of mobility education. However, overall it is not possible to identify any satisfactory progress in this matter. Much more considerable effort is still necessary in order to replace the "parental taxi" and to achieve the goal of leading young people in an age-appropriate way towards the idea of independent mobility on foot or by bicycle.

- a) Together with the Senate Department for Education, other stakeholders from the field of education and transport policy groups, the Senate Department for Urban Development and the Environment will – for example, in its implementation of the traffic safety programme – actively support a coordinated fresh start in the area of mobility education. In all of this, it is intended to strengthen the role of road traffic awareness centres for young people as possible centres for mobility education.
- b) The organisations VCD (*a German Automobile Club*), BUND (*an environmental association*) and FUSS e.V. (*a pedestrians' association*) will continue to run the campaign "To school and nursery school on foot" and, in so doing, will have proper regard for the bicycle. The Senate Department for Education, Youth and Science will support this campaign by making use of it in nurseries and schools as well as in work with parents.
- c) The Senate Department for Education, Youth and Science will meet its responsibility under the Education Act concerning learning about mobility by incorporating this topic into curricula, syllabi, projects, classroom materials for teachers and pupils and in-service training and development opportunities for teachers. The secondary school level of the education service should also be addressed, for example by cycling-related projects. Preparation for the cycling test will continue to be supported in cooperation with the police – with its practical component to be held, where possible, in real traffic conditions.
- d) The associations involved (e.g. BUND, VCD, ADFC and FUSS e.V.) organise the "working party on mobility education", which will monitor these developments at least once a year.
- e) The boroughs will check the bicycle parking facilities at schools and nurseries which they run in terms of their quality and quantity and will adopt appropriate measures where shortcomings are identified.

#### **4.7 Finding one's way**

Cycling requires a specific way of looking at the city in terms of spatial relationships, good routes and distances to be covered. Particularly for people who do not know the city or who are new to cycling, any help with orientation contributes to the avoidance of time loss and uncertainty, to the willingness to try out new routes and to an increase in cycling pleasure. Moreover, signposting at many points in the city is a clear signal that such a city is bicycle-friendly.

- a) Together with the boroughs, the Senate Department for Urban Development and the Environment will signpost the main cycle routes, as they are completed, by 2017 and will keep the signposting up to date. Links to important destinations in the vicinity of the routes and to large-scale bicycle parking facilities at stations and bus and tram stops should also be signposted. The boroughs are checking to see on which sections important borough routes and destinations should be included in the signposting and are presenting their suggestions to the Senate Department for Urban Development and the Environment.

- b) The Senate Department for Urban Development and the Environment and the boroughs will support the creation of city maps for bicycles and other tools for route planning, including digital and Internet-based applications, by making available to providers of such information their knowledge about bicycle traffic links and plans and important bicycle parking facilities.
- c) The route planner of the central office for transport information will be further developed to make it cycling-related (for example, by extending the basic network to include off-road routes, and by providing options to use particularly bicycle-friendly links and to avoid particularly difficult ones, options about how to connect with public transport and options to involve GPS systems).

## **4.8 Public relations work aimed at target groups**

### **4.8.1 Developing an overall strategy**

In order to create a bicycle-friendly climate and to reduce people's reservations about the bicycle as a means of transport it is necessary to have qualified public relations work which focuses on the rational as well as the emotional motives for choosing this means of transport. On the one hand, this public relations work has to create a broad awareness – within the context of mobility management as well – of measures being adopted to benefit cycling and to provide information about specific problems (for example, signposting, road safety or transporting children). On the other hand, this public relations work has to communicate positive signals, making reference to image factors that are typical of cycling (for example, fitness, experience, fun, spontaneity) and to communicate an interesting and contemporary alternative to travelling by car.

As a first step, the logo "FahrradStadtBerlin" (*BicycleCityBerlin*) was developed. This logo is used to make an annual award for activities and measures which have contributed to a particular extent to the promotion of cycling in Berlin, but it is also used for other activities and publications of the Senate Department and of the members of the cycling committee.

Public relations projects in cities like Copenhagen, London and Munich have shown that a high level of awareness can be created where there is a committed approach and where a wide variety of component parts of a campaign are put together. These campaigns have also shown that the financial means necessary for this can produce demonstrable results in terms of improving the climate on the roads and of transferring journeys from the car to the bicycle.

- a) The Senate Department for Urban Development and the Environment will use the logo "FahrradStadtBerlin" to bring its cycling-related public relations work into a single consistent concept and, taking into account the experiences of other cities, will extend this concept to include new elements. Financial resources also have to be made available for this and the effectiveness of their use has to be evaluated. In view of limited budgets efforts should be intensified to find sponsors for individual campaigns.

The administrative units and organisations that are represented on the cycling committee are requested to relate their own public relations work on cycling to

this "shared concept" and to contribute to establishing cycling as a natural form of mobility in people's minds. Situations involving upheaval, like moving house or changes in family status, provide good opportunities for this. Important places to start are to provide information about the advantages of cycling in terms of time and money, but also about the effects of physical activity on health and about the "sense of an experience" which cycling brings.

- b) The Senate Department for Urban Development and the Environment will provide information about the New Cycling Strategy for Berlin and will support the steps in the implementation of this strategy with public relations work. The organisations participating in the cycling committee are requested to provide critical support to the implementation of the strategy in their own public relations work as well and to promptly provide information about measures, projects and campaigns in their particular areas of responsibility or interest. The Internet sites of the different organisations involved should be updated regularly and linked to each other.
- c) The Senate Department for Urban Development and the Environment will continue to present the award "FahrradStadtBerlin". The publicity for this award should be improved.
- d) The ADFC, together with the boroughs, will develop locally focussed communication projects on the subject of cycling. It will also work together with FUSS e.V. to strengthen the common purpose of cyclists and pedestrians and will continue to make use of the great interest of the media and the public in the annual bicycle journey to the "Stern" (*a major, centrally located roundabout*) in Berlin to win over new groups of users for cycling.

#### 4.8.2 Addressing the most frequent reasons for cycling and the largest target groups

By far the greatest potential for transferring journeys to the bicycle is to be found in the journeys for leisure, shopping and to work (in this order) undertaken by the large age cohorts between 25 and 60 years; and in these age groups particularly amongst working people and car owners. If people who have access to a car used a bicycle for their various journeys as often as people who do not have access to a car, approximately 600,000 car journeys a day could be saved in Berlin.

Cycling's share of the journeys undertaken in Berlin differs considerably depending on location, with a particularly large difference between the centre of the city and its outlying areas. Alongside longer distances and greater levels of car ownership, socio-cultural factors are also a significant reason why similar journeys are undertaken by inhabitants in the outer areas of the city much more often by car and much less often by bicycle.

- a) The Senate Department for Urban Development and the Environment, together with the transport policy groups, will look for ways to persuade retail associations, shopping centre managers, retail chains and shopping streets as well as the landlords of commercial premises to take into proper consideration the needs of those of their customers that use a bicycle. Good bicycle parking facilities and improvements in the accessibility of centres and shops by bicycle would be of enormous help to this group of customers. However, transport

solutions like delivery services, spacious baskets for bicycles or trailers for goods and children make shopping by bicycle easier and should be publicised better.

- b) In public relations work on cycling the low bicycle affinity of the (mostly working) car owners and inhabitants in the outlying areas of the city should be specifically addressed.
- c) The ADFC, together with the AOK (*a major public health insurer*), will continue to run the annual campaign "To work by bike" in Berlin with the goal of making better use of the considerable potential for transferring journeys to work to the bicycle and, at the same time, of drawing attention to the health aspects of cycling. The Senate Department for Urban Development and the Environment and the boroughs support this campaign.
- d) In 2011 a competition to find the "most bicycle-friendly employer" was held in Berlin for the first time and was supported by the Senate Department for Urban Development and the Environment. The Senate Department for Urban Development and the Environment will check to see if this competition can also become a regular event.

#### 4.8.3 Taking demographic change into consideration

The use of the bicycle for day-to-day mobility declines sharply from the age of 60 years onwards; indeed more sharply in Berlin than in other German cities. By contrast, car use amongst the growing population group of older people increases because of the "cohort effect". In the case of people of non-German ethnic origin, a population group that is also increasing in number, bicycle use is often not very widespread.

Public relations work should specifically address the mobility needs of older people and make it easier for them to decide to use a bicycle. Questions of objective and subjective safety, of clarity and finding one's way easily play a major role here. However, technical developments, like e-bikes, can make a contribution and should be communicated accordingly.

#### 4.8.4 Making use of technical innovations

For many problem areas that are typical of bicycles and that individually or taken together represent an obstacle to greater use of the bicycle (lighting, susceptibility to breakdowns, theft, transporting loads, transporting children, safe parking facilities) there are technical solutions which, however, to some extent have not yet become established amongst everyday cyclists. The trade fair "VeloBerlin", which has been held since 2011 as a key trade fair for bicycle-related products, and other events of this type can contribute to relevant information being disseminated more effectively.

- a) Public relations work on cycling should place a greater focus on practical problems of bicycle use and show technical solutions to these problems. This is particularly a responsibility of the bicycle industry and the relevant associations.
- b) The organisations represented on the cycling committee can support the bicycle industry at trade fairs and other publicity-related events that can contribute to



the use of the bicycle in city traffic, for example, by being present themselves at these events or by acting as multipliers to increase awareness of these events amongst potentially interested groups.

## **5 MODEL PROJECTS**

### **5.1.1 Aims and selection criteria**

“Model projects” have been selected for prompt implementation from the wide range of areas of activity named above. The following criteria are applicable with regard to the process of selection:

- the expectation of significant and sustainable contributions to the promotion of cycling in various fields of action and to the perception of the interests of cycling in public discourse,
- a contribution to the further development of existing tools for the promotion of cycling or to the addition to these tools of approaches which have not yet been tried out in Berlin,
- model character for a city-wide standardisation of methods and evaluations,
- suitability as a role model for implementation at borough level,
- achievability within a foreseeable time and cost framework, and
- suitability as a driver for establishing the promotion of cycling in the long term.

Model projects which involve construction measures should as a rule cover several areas with different problems so that they can be accorded greater weight, so that chance factors are minimised in the selection process and so that sound conclusions can be drawn in the form of principles for action that go beyond the scope of the individual project. The measures are not yet fixed in the cycling strategy in terms of their geographical location – the boroughs can apply to implement suitable projects within their area of responsibility in competition with one another. The model projects that are merely briefly outlined in section 4 should be worked out in greater detail in a further work stage so that on this basis a tendering process for the necessary work can be prepared.

### **5.1.2 An overview of the model projects (see also the list of measures in the appendix)**

1. Increasing the speed of traffic flow and extending capacity on two sections of major routes, preferably in outlying parts of the city away from rail corridors.
2. Design and implementation of three cycle route sections at borough level with particular local importance and with a possible role model function.
3. Implementation of three local concepts by means of measures on public roads/pavements in respect of bicycle parking facilities and links to public transport.

4. Implementation and evaluation of three innovative solutions at road junctions (for example, cyclists' corridor) – and drafting of general plans for these solutions if they work.
5. Bicycle-friendly coordination of traffic light systems ("green wave" for cyclists) on a route section that covers at least five sets of traffic lights.
6. Model project for a bicycle-friendly shopping street: furnished with bicycle parking facilities of a model character and with innovative service provision (for example, hire of transport bikes).
7. Implementation of at least three projects to be named in the context of the "overall concept for bicycle parking" (for example, bicycle station with service provision for cyclists and at least 500 parking spaces).
8. Running a campaign that calls for behaviour in accordance with the rules and for mutual consideration between car drivers and cyclists, but also between cyclists and pedestrians.

## **6 IMPLEMENTATION, MONITORING SUCCESS AND SUBSEQUENT ADJUSTMENTS**

### **6.1 Pre-conditions for prompt implementation**

The measures and recommendations for action contained in the cycling strategy should be introduced and implemented within a reasonable period of time. For this reason, responsibility for them is allocated to one or more than one initiator and, where necessary, further parties that are involved in their implementation. Insofar as ongoing tasks are not involved, a time horizon for implementation is also set. To provide a clearer overview, the measures are briefly summarised in table form in the appendix.

The prompt implementation of investment measures for promoting cycling is made difficult by the fact that these measures are often connected with requirements from other areas of activity and need an extensive amount of time and also personnel for agreement to be reached. Often there isn't a fundamental consensus about the type of measures to be implemented (for example, cycle path or cycle lane, managing bicycle traffic at junctions, time windows at traffic lights, cycling in park areas and nature reserves, restrictions for parked or stationary vehicles ...). Because the interests of each of the parties involved are weighted differently, a solution which everyone agrees to usually has to be worked out on a case-by-case basis – taking as a point of departure the goals and recommendations for action of the cycling strategy. This process needs to be supported by people with the necessary skills. For this reason, it is necessary for the boroughs to arrange staffing accordingly when implementing the cycling strategy.

Within this context, it should also be ensured that there is at least one engineers' office which is responsible for the interests of cycling promotion. In order to avoid delays in implementation it is necessary to have administrative support in central administration, for example with regard to managing the investment measures, to the organisation of traffic light facilities and cycling facilities and to examining construction planning documents. Here too it is necessary to arrange staffing and staffing deployment accordingly in order to implement the cycling strategy. Where necessary, the two areas of activity, cycling and pedestrians, can be brought together.

Last but not least, there can be a problem with the involvement of utilities companies, which often take investment measures on public roads as an opportunity to realise their own projects. This can mean that the implementation even of relatively simple cycling measures is considerably delayed. In such cases early and binding coordination work is necessary, for example, in the context of regular meetings with the participation of the known developers (utilities companies and bodies responsible for roads and engineering structures).

## **6.2 Sources of data, monitoring**

The measures and recommendations for action in the cycling strategy should generate qualitatively noticeable and quantitatively measurable outcomes. As a check on success the Senate Department for Urban Development and the Environment will monitor at intervals of approximately two years the extent to which it was possible to achieve the strategic goals listed in section 3.1 and to implement the measures and recommendations for action listed in section 4 of the cycling strategy in order to identify, where necessary, the need to make subsequent adjustments.

An important requirement for an effective check on success and an effective subsequent adjustment is that there should be a sound basis for information. For this reason,

- a) the Senate Department for Urban Development and the Environment will ensure that the necessary data for the development of bicycle use in city traffic is made available by continuing with and extending the bicycle traffic censuses at permanent census points and in the context of routine road traffic censuses and by participating in supra-regional data collection and surveys (MiD – *Mobility in Germany* or SRV – *Mobility in Towns*) and will also monitor the progress made by conducting from time to time user surveys in a form that differs from one borough to the next;
- b) the boroughs will gradually enlarge the content of the traffic information system for roads (VISS) to include information about the amount and quality of existing cycling facilities;
- c) the police will continue to carry out and to make available annual evaluations of their accident data base regarding accidents involving cyclists;
- d) the transport companies will, within the scope of what is possible, provide up-to-date estimates regarding the transport of bicycles on public transport and regarding the development of the bicycle parking situation at stations and bus and tram stops;
- e) all the units and organisations involved in the cycling committee will report regularly on the progress being made in implementing the measures which fall under their area of responsibility and on any new problems which occur.

On this basis

- f) associations and other stakeholders will monitor the implementation of the strategy critically and will draw the attention of the administration to problems and delays;
- g) the Senate Department for Urban Development and the Environment will call a meeting of the members of the cycling committee at least once a year in order to discuss the stage which the implementation of the measures and recommendations for action has reached and to develop suggestions for adjusting the strategy and for additional measures on the part of the individual participants;
- h) the Senate Department for Urban Development and the Environment will, taking into consideration the general financial and staffing conditions, check carefully to see whether and how the post of the cycling commissioner, which in its current form is out-dated, can be further developed to achieve the greatest possible value in terms of the promotion of cycling.

The results of this monitoring process will be summarised every two years in a short report and made available to the members of the cycling committee.

## **7 Financing**

In the course of implementing the cycling strategy the level of funds available to cycling has risen constantly over the last few years despite the difficult financial situation of the Federal State of Berlin. Notwithstanding these difficulties, the city aims, within the financial framework available for road construction, to achieve step by step a level of funding of €5 per inhabitant per year for measures for the promotion of cycling. This would represent a further increase in funding.



## APPENDIX: AREAS OF ACTIVITY AND MEASURES

Number	Measure	Responsible body / Initiator	Important participants	Frequency / Deadline <sup>2</sup>
<b>4.1</b>	<b>Securing and extending existing qualities</b>			
4.1.1a	Maintaining existing cycle paths/lanes	Boroughs	SenUrbEnv	On-going task
4.1.1b	Standard improvements for existing cycle paths/lanes	Boroughs, SenUrbEnv		On-going task
4.1.1c	Reporting defects in existing cycle paths/lanes	ADFC	Boroughs, SenUrbEnv	On-going task
4.1.2a	Keeping cycle paths/lanes clear of obstructions; snow clearing, cleaning	Boroughs, SenUrbEnv	BSR ( <i>Berlin street cleaning company</i> )	On-going task
4.1.2b	Keeping cycle paths/lanes clear of parked cars	Boroughs	Police	On-going task
4.1.2c	Reporting obstructions on cycle paths/lanes	ADFC	Boroughs, SenUrbEnv	On-going task
4.1.2d	Checking / penalising parking on cycle paths/lanes	Boroughs		On-going task
4.1.2e	PR work on parking on cycle paths/lanes	SenUrbEnv	(see 4.3.2b)	2013
4.1.3a	Reporting building sites that hinder cycling	ADFC	Boroughs, SenUrbEnv	On-going task
4.1.3b	Bicycle-friendly requirements for building sites	Boroughs, SenUrbEnv		On-going task
4.1.4a	Examining the obligation to use cycle paths	SenUrbEnv (VLB)	ADFC	2013
<b>4.2</b>	<b>Better roads and paths for cycling</b>			
4.2.1a	Sufficient bicycle capacity in the case of all measures	SenUrbEnv, boroughs	Associations	On-going task
4.2.2a	Fast cycling possible in the case of all measures	SenUrbEnv, boroughs		On-going task
4.2.2b	Bridges for pedestrians and cycling in accordance with Senate Development Plan for Transport (StEP Transport)	SenUrbEnv		See StEP I 1.3
4.2.2c	Model projects for making fast cycling possible (see 4.2.3c, 4.2.6)	SenUrbEnv, boroughs		By approx. 2017
4.2.3a	Completion of main cycle route network	SenUrbEnv, boroughs		By approx. 2017
4.2.3b	Information about completed routes	SenUrbEnv		On case-by-case basis
4.2.3c	<i>Model project 1: Two fast main routes</i>	SenUrbEnv, boroughs		By approx. 2017
4.2.3d	Pedelec corridor for Berlin/Brandenburg	SenUrbEnv, boroughs and others		By 2015
4.2.4a	Planning/implementation of subsidiary routes	Boroughs	Associations	2013/On-going task
4.2.4b	Support for/implementation of subsidiary route plans	SenUrbEnv		On-going task
4.2.4c	<i>Model project 2: Three subsidiary routes at borough level</i>	Boroughs	SenUrbEnv, associations	By approx. 2017

<sup>2</sup> All information about the time of implementation is conditional upon the availability of funds.

Number	Measure	Responsible body / Initiator	Important participants	Frequency / Deadline
4.2.5a	Good cycling conditions on main roads	SenUrbEnv, boroughs		On-going task
4.2.5b	Cycle paths/lanes on federal trunk roads	SenUrbEnv		On-going task
4.2.5c	Examine opening up one-way streets	SenUrbEnv, boroughs		By approx. 2013
4.2.5d	<i>Model project 3: Three bicycle-friendly local areas</i>	Boroughs	SenUrbEnv, associations	By 2017
4.2.6a	Safe and fast cycling at junctions	SenUrbEnv, boroughs	Associations, police	On-going task
4.2.6b	<i>Model project 4: Three innovative junction solutions</i>	SenUrbEnv, boroughs	Associations, police	By approx. 2017
4.2.6c	<i>Model project 5: "Green wave" for cyclists</i>	SenUrbEnv	Boroughs	By approx. 2017
<b>4.3</b>	<b>Safety on the roads</b>			
4.3.1a	Paying attention to safety standards in the case of new construction projects	SenUrbEnv, boroughs	Police	On-going task
4.3.1b	Removing safety defects on existing road network	SenUrbEnv, boroughs	Police	On-going task
4.3.1c	Examine/stop two-lane turning off involving limited compatibility of road users	SenUrbEnv		By 2017
4.3.1d	Evaluation/publication of bicycle accident statistics	Police, SenUrbEnv		Annually
4.3.2a	Promote mutual consideration	All members of cycling committee		On-going task
4.3.2b	<i>Model Project 8: Campaign for mutual consideration</i>	SenUrbEnv	Stakeholders in traffic safety	By 2013
4.3.2c	Information campaign on new Highway Code	SenUrbEnv	Stakeholders in traffic safety	2013
4.3.2d	Continuation of "Blind Spot Campaign"	SenEdYSc	Police, associations	Annually
<b>4.4</b>	<b>Sufficient bicycle parking spaces</b>			
4.4.1a	Overall concept for bicycle parking (with model projects)	SenUrbEnv	Boroughs, associations	By approx. 2017
4.4.1b	Increase number of bicycle parking spaces in public places	Boroughs		On-going task
4.4.1c	Secure bicycle parking spaces at major events	Boroughs		On case-by-case basis
4.4.2a	Implementation of Berlin Building Code for bicycle parking spaces	Boroughs, SenUrbEnv		On-going task
4.4.2b	Bike hoops in street – simple application procedure	Boroughs		By 2013
4.4.2c	Conditions for cancelling obligation to provide bicycle parking spaces	Boroughs, SenUrbEnv		On-going task
4.4.2d	Conditions for approval of mobile bike stands	Boroughs, SenUrbEnv		2013

Number	Measure	Responsible body / Initiator	Important participants	Frequency / Deadline
4.4.3a	New approaches to bicycle parking at journey start and destination, <i>Model project 6: Bicycle-friendly shopping street</i>	SenUrbEnv	Associations, retail sector	(see 4.4.1a)
4.4.4a	<i>Model project 7: Three large, innovative bicycle parking facilities</i>	SenUrbEnv	Boroughs, associations	(see 4.4.1a)
<b>4.5</b>	<b>Links to public transport</b>			
4.5.1a	Continuation of programme for bicycle parking stands at transport stops	S-Bahn, BVG	SenUrbEnv, boroughs	On-going task
4.5.1b	Bicycle parking facilities at long-distance and regional railway stations	SenUrbEnv	DB Station+Service	By approx. 2017
4.5.1c	Model project on above (see 4.4.4a)	SenUrbEnv	DB/S-Bahn/BVG	(see 4.4.1a)
4.5.2a	Securing good conditions for transporting bikes on public transport	S-Bahn, BVG	SenUrbEnv, DB, VBB	On-going task
4.5.2b	Procurement of bicycle-friendly transport services	SenUrbEnv	DB/S-Bahn/BVG	On-going task
4.5.3a	Pilot project for public bicycles – evaluate and possibly continue	SenUrbEnv	DB, boroughs	2013 ff.
4.5.4a	Examine time restrictions in bus lanes	SenUrbEnv, boroughs	Associations	By 2014
4.5.4b	Examine bus lanes with high level of conflicts	BVG, SenUrbEnv	Associations	By 2014
4.5.4c	Public relations work on behaviour in bus lanes	SenUrbEnv	(see 4.3.2b)	2013
<b>4.6</b>	<b>More attention to be paid to young road users</b>			
4.6.1a	Co-ordinated fresh start in area of mobility education	SenUrbEnv, SenEdYSc	Associations	From 2013
4.6.1b	Continue campaign “To school on foot”	VCD, BUND	SenEdYSc	Annually
4.6.1c	Curricula, syllabi, projects on mobility education	SenEdYSc	Police	On-going task
4.6.1d	Working party on mobility education	Associations	SenUrbEnv, SenEdYSc	Annually
4.6.1e	Bicycle parking facilities at schools and nursery schools	Boroughs		By approx. 2017
<b>4.7</b>	<b>Finding one’s way</b>			
4.7a	Signposting on main routes and adjoining routes	SenUrbEnv	Boroughs	By approx. 2017
4.7b	Support for route-planning tools	SenUrbEnv, boroughs	ADFC, BUND	On a case-by-case basis
4.7c	Further development of the route planner of the central office for transport information	SenUrbEnv	ADFC, BUND	By 2013



Number	Measure	Responsible body / Initiator	Important participants	Frequency / Deadline
<b>4.8</b>	<b>Public relations work aimed at target groups</b>			
4.8.1a	Examination/continuation of PR work	SenUrbEnv	All members of cycling committee	2013 / on-going task
4.8.1b	Information about cycling strategy and its implementation	SenUrbEnv	All members of cycling committee	2013 / on-going task
4.8.1c	Award of prize "BicycleCityBerlin"	SenUrbEnv	Cycling committee	Annually
4.8.1d	Communication campaigns at local and borough level	ADFC, boroughs		On a case-by-case basis
4.8.2a	Involvement of housing sector, retail sector and commerce	SenUrbEnv	Associations	On-going task
4.8.2b	Particular attention paid to outlying areas of the city	SenUrbEnv	Associations	On-going task
4.8.2c	Continuation of campaign "To work by bike"	ADFC, AOK		Annually
4.8.2d	Competition: "Berlin's most bicycle-friendly employer"	SenUrbEnv		At intervals
4.8.3	Taking into consideration demographic change in public relations work	All members of the cycling committee		On-going task
4.8.4a	Communication of technical innovation	Bicycle industry		On-going task
4.8.4b	Trade fairs and events on bicycle themes	Bicycle industry	All members of the cycling committee	On a case-by-case basis
<b>5.</b>	<b>Model projects (covered in 4.1 to 4.4)</b>			
<b>6.</b>	<b>Implementation, monitoring success and subsequent adjustments</b>			
6.1	Improvement in staffing for cycling	SenUrbEnv, boroughs		Immediately
6.2a	Cycling censuses, user surveys	SenUrbEnv		On-going task
6.2b	Information about cycle paths/lanes in VISS	SenUrbEnv, boroughs		On-going task
6.2c	Continuing to evaluate accidents involving cyclists	Police		Annually
6.2d	Information about transport and parking options on public transport	Berlin transport companies		Annually
6.2e	Information about progress on implementation	All members of the cycling committee		Annually
6.2f	Monitoring implementation critically	Cycling officer	All members of the cycling committee	On-going task
6.2g	Continue with annual meetings of cycling committee	SenUrbEnv	All members of the cycling committee	Annually